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THE COST STANDARD FOR PUBLIC UTILITY RATE LEVELS*

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Today is manifestly a day of enhanced control of economic life by the government, as the recent programs of the Southern Economic Association might indicate. This control raises anew the problem of price relationship. Under a perfectly functioning system of free enterprise, relative prices are of course dictated by competition; but when the government substantially modifies the competitive mechanism, it becomes necessary to guide prices and production by public authority.

The task of guidance is exceedingly difficult. How can prices be so fixed as to make labor and capital equally productive in the regulated and in the unregulated fields? The long experience with mercantilism sheds little light on this question because economic conditions were far too unlike those of today. For instruction it is probably best to turn to the public utilities. These have been regulated in the United States under modern conditions for many years, and a study of their control should elucidate the general problem of price regulation under a regime of private property. It is to be remembered in the beginning, however, that the conscious control of prices where a few highly capitalistic concerns supply services is in many respects easier than where numerous producers of commodities enter or withdraw from production more

* Presidential address delivered at the Eleventh Annual Meeting of The Southern Economic Association, Birmingham, Alabama, October 28, 1938.

or less at will. Cautious students of public utilities recognize the advantages of competition and the difficulties of regulation.

Let it be granted that public regulation of rates is advisable, notwithstanding the attacks made upon it. Some economists recommend instead a transition to public ownership of the utilities; say that regulation—a compromise between competition and collectivism—is "merely an alluring mirage along a downward course from which there is no returning";[1] but regulation has accomplished much, and truly progressive control has not yet been given a thorough trial. Public ownership has its own drawbacks. Certain other authorities have insisted that regulation so checks the incentive to efficiency that it is better to rely upon potential competition for the control demanded.[2] But the argument fails because intelligent regulation can reward efficiency and because potential competition does not prevent the utilities from charging more than they need to charge. Such competition is effective only within broad limits and varies widely in significance according to the class of service. In the absence of regulation, rates and profits may be too high on account of monopoly or too low on account of ruinous competition. If they are too high, consumers pay more than necessary, and purchasing power becomes uneconomically apportioned between the regulated and the unregulated industries. If they are too low, service suffers and purchasing power is again inappropriately distributed.

Public utility prices may be controlled directly through rate fixing or indirectly through the restriction of investment. The accepted method is primarily rate fixing. Is this the best approach? At least one student of public utilities has reasoned that it is theoretically unsound since it fails to correct underinvestment or overinvestment.[3] But the flow of capital tends to correct maladjustments in investment, and the reasoning assumes too close a relation between investment and individual rates. Never-

[1] See H. C. Simons, "The Requisites of Free Competition", *American Economic Review*, Supplement, March, 1936, pp. 68–76.

[2] See Philip Cabot, "Public Utility Rate Regulation", *Harvard Business Review*, April, 1929, pp. 257–266; July, 1929, pp. 413–422.

[3] B. W. Knight, "Control of Investment versus Control of Return in the Regulation of Natural Monopolies", *Quarterly Journal of Economics*, February, 1930, pp. 263–285.

theless, it is desirable to supplement rate fixing by means of the certificate of public convenience and necessity or its equivalent. The certificate alone is not enough, but without it prosperity often brings disorderly overexpansion, which may be as bad for the public as underinvestment. This suggests the observation that regulation could be improved by more affirmative control. The recent monumental study of the Interstate Commerce Commission, though rightfully according the commission a long record of success, shows that the commission has followed the policy of leaving the initiation of changes to the carriers.[4] This has retarded the institution of economies in the railroad system as a whole. The government, including the courts, cannot excuse a negative attitude on the ground of possible interference with management; for prosperous public utilities are essential to the national welfare, and the companies left alone almost of necessity find themselves unable to take the broad but frequently vital perspective. A case in point is the poor record of accomplishment under the Emergency Railroad Transportation Act of 1933.

If rate fixing is to be the method of control, a standard for the rates as a whole is required. At present the basic standard is the cost of service, which includes operating expenses, taxes, and fair return. This is frequently said to mean rates equivalent to what they would be under competitive conditions. Leaving aside for the moment the underlying assumption of the general efficacy of competition, question may be raised as to the correctness of this formulation of the rate making objective. When it is said that rates should be fixed at a competitive level, the reasoning is doubtless that such rates would together equal the cost of the service, including a normal profit; hence would bring about a proper distribution of productive resources because prices outside the field of regulation are also determined on a cost basis. But this analysis is hardly correct. In the first place, to say that public utility rates as a whole should cover but no more than cover cost is not the the same thing as saying that they should be what they would be under competitive conditions. It is true that cost tends to control under competition, but this is a cost different from that under

[4] I. L. Sharfman, *The Interstate Commerce Commission.*

monopoly. Public utilities as monopolies utilize larger plants and can produce at a lower cost than they would were competition allowed. Not to recognize the advantage of monopoly in capitalization is unfair to the public. In the second place, prices within much of the unregulated field are not in fact strictly competitive; they tend increasingly to follow the dictates of "monopolistic competition."

On the assumption of reasonably efficient management, the aim of utility regulation, then, is simply rates that will produce sufficient gross income to provide for operating expenses, taxes, and a fair return. The sum of these three, to repeat, is not necessarily the equivalent of cost of production under competition. The rate of return is merely that rate which will attract the requisite capital, and it may not be identical with the competitive rate of return, but lower; for in many respects the public utilities stand in a favored position where risk is less than in ordinary industries. Requisite capital means enough to provide the service that consumers are willing to take at rates maximizing the service.

Defined as that percentage which will attract sufficient capital, the rate of return becomes a more or less indefinite guide, but more precise formulations appear to be unsatisfactory. Sometimes the correct rate is said to be a rate keeping the common stock of public utilities at par, but this definition requires so much qualification that not much is gained by the description. Experience with public utility regulation shows that no mechanical rule can take the place of principles stated in general terms and put into effect by properly constituted commissions according to prevailing circumstances.

Is the cost standard a rational one? Will it establish the proper relationship between the regulated and the unregulated prices? The answer depends upon the amount of the cost and its influence in each case. If cost is at a minimum so that the lowest possible total unit cost is equated with marginal demand price in both the regulated and the unregulated fields, the answer is in the affirmative; but if this equation is absent in either one or both instances, the answer is in the negative. With the determination of other than public utility prices we are not here immediately concerned, but it may be observed that so-called competitive prices are not

always the best prices. Assuming, however, that prices outside the field of public utilities are determined through the play of competition or the arm of the government at the lowest practicable point, the problem is to keep utility rates at a similar level. For short periods rates need not necessarily cover costs already sunk, for the return from the utilization of misdirected equipment may be greater than the output of the operating labor and capital when employed elsewhere; but in the long run rates must provide a revenue equal to all costs if the supply of service is to be adequate. So long as the public utilities are privately owned and depend upon the voluntary decisions of investors for capital, there seems to be no other criterion for the general level of rates which will insure an economical distribution of productive resources.

It must be admitted that the control of public utility rate levels according to cost has not proved to be wholly effective, i.e., service has not been maximized; but the cost of service standard has been found wanting, not because of inherent weaknesses, but primarily because of the way in which it has been interpreted and utilized. Obsessed with the idea of competitive value, the courts have insisted that cost of service embrace cost of reproduction. It is not our purpose here to enter upon an extended discussion of the relative merits or demerits of cost of reproduction as a rate base, but only to draw certain warrantable conclusions. A palpable finding is that the sort of cost of reproduction, if any, that theory demands is administratively impracticable. To determine the cost to reproduce substantially identical plants under present conditions is in all conscience not easy, but to fix the value of hypothetical plants is virtually beyond the realms of possibility. If our experience with public utility regulation teaches anything, the lesson is that the regulatory standards must be capable of reasonably effective administration. Apart from administration, cost of reproduction is an illusory guide, first, because in a dynamic world cost of reproduction is not an acceptable measure even of competitive value; second, because competitive value, as stated above, is not the correct standard for public utility rates.

To destroy the cost of reproduction is to make a case for original cost. A rate base of some kind is essential in the control of profits; only two reasonable bases exist; and of the two, original cost

better stands the test not only of theory but also of practice, if realistically employed. We cannot agree with those who say that the destruction of cost of reproduction does not establish original cost.[5] Their argument rests upon the assumption that the so-called rate base is really an earnings base only; but reflection shows that if it is an earnings base it is also a real and vital rate base, because it determines an important part of the total revenue that particular rates must produce.

But to insist upon the reality of the rate base and the desirability of original cost as its measure does not imply approval of the serious misuse of the rate base in relation to individual rates. Frequently the tendency is to determine first the fair return, then mechanically to set the rates so as to produce this return. This underemphasizes particular rates. The rate base and the rate of return set the limits of the rate level, but the rates themselves fix the level. This is true because the adjustment of particular rates, according to the nature of the demand, affects the volume of output, and the latter influences cost and therefore profit. A normal profit at one level of rates does not mean that an equal profit may not be earned at a lower level of rates if management is efficient and pricing is intelligent. There is a real need, therefore, for a better appreciation of the economy of low rates and wide-spread service.

If the objective of the lowest possible rates is to be realized, the existing regulatory policy must be modified, partly through legislation and partly through commission practice. The authorities in control should receive and exercise the right to compel prompt reductions in rates, to supervise more carefully operating expenses, to order the institution of economies in operation; and the companies should be encouraged and given freedom to experiment. These things will require the collection of more adequate cost data than is now available and more ample appropriations for the commissions. A relaxation of regulation may also be needed at certain points.

An inflexible cost standard can never be made to work under rapidly changing price levels. In order to keep public utility rates

[5] See M. G. de Chazeau, "The Nature of the 'Rate Base' in the Regulation of Public Utilities", *Quarterly Journal of Economics*, February, 1937, pp. 298–316.

in line with other prices, during the recent depression practically all commissions have been virtually forced to resort to substitutes for the rate making rule which are either inherently faulty or contrary to the position of the courts.[6] But this has been due chiefly to a narrow interpretation of the rule, especially on the part of the courts. Had a workable rate base been established, and had adequate dividend reserves been built up through the fair rate of return, much of the trouble could have been avoided. Where the utilities have not become obsolete, rates could have been adjusted without seriously jeopardizing investors and without placing utility securities in the speculative class. Cost looks to the long-run.

Pending the discovery of more convincing evidence to the contrary, cost of service may be said to be an effective regulatory standard. Made administratively practicable and sufficiently flexible, it provides a means whereby productive capacity can be reasonably well distributed among the regulated and the unregulated industries. It may not maximize human satisfaction, but it has the advantages that arise from making industries stand on their own feet.[7] Prominent among these benefits are less excessive productive capacity, more careful scrutiny of the economy of undertakings, and greater equality in competition.

[6] See E. M. Bernstein, *Public Utility Rate Making and the Price Level.*

[7] On maximizing satisfaction, see Harold Hotelling, "The General Welfare in Relation to Problems of Taxation and of Railway and Utility Rates", *Econometrica*, July, 1938, pp. 242–269.

THE PURCHASING POWER PARITY THEORY REEXAMINED

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The purchasing power parity theory of foreign exchange as restated[1] by Professor Gustav Cassel has been criticized and statistically tested many times since the publication of his *Money and Foreign Exchange After 1914*. In this paper it is proposed to state certain important theoretical objections to the theory and to submit the theory to what is believed to be an improved statistical test.[2]

I

Theoretical Criticism. One of the earliest and perhaps the best of Professor Cassel's expositions of the purchasing power parity theory appeared in the already mentioned *Money and Foreign Exchange after 1914*. Professor Cassel has reaffirmed his belief without important modifications more recently in *The Downfall of the Gold Standard* (1936).

In the first of these books Professor Cassel set out to explain what it was that determined currency exchange rates in Europe when the gold standard was not functioning, that is, when currencies were on an inconvertible basis. Laymen and even bankers, as late as 1922, were talking as if pre-war (gold standard) rates of exchange were normal, and that actual exchange rates of European nations could be expected soon to return to those normal rates, presumably in some automatic fashion, even though the currencies of those nations were no longer on gold-standard bases. To

[1] John Wheatley, William Blake, Ricardo, Francis Horner, and McCulloch were among the earliest English writers to discuss the general ideas embodied in the purchasing power parity theory.

[2] The test was suggested to the writer by Dr. E. M. Bernstein, Professor of Economics, University of North Carolina.

Professor Cassel such a hope was ridiculous, and the theory here under discussion was offered in support of his view.

The principal reason for a foreign currency being in demand, said Professor Cassel, is its power to purchase goods produced in the foreign country. People in country A want to purchase goods in country B and vice versa. In order to get the desired goods they have first to swap currencies. Hence, the demand for those currencies, hence exchange rates. Further: "Our valuation of a foreign currency in terms of our own . . . mainly depends on the relative purchasing power of the two currencies in their respective countries."[3]

More fully expressed, the general theory is as follows: When normal trade between two countries[4] has been established for some time, the exchange rates will become fixed, and so long as no changes take place in the domestic purchasing power of the two currencies, none will take place in their exchange rates. But "when two currencies have undergone inflation, the *normal* rate of exchange will be equal to the old rate multiplied by the quotient of the degree of inflation in the one country and in the other."[5] Thus, if the old (base year) exchange rate of the dollar and pound sterling had been 5 to 1, the new parity would be 6 to 1, providing the *domestic* purchasing power of the dollar had fallen somewhat more than that of the pound. This fall would be indicated and measured by a greater rise in the American general price level than in the British price level.

Following his general statement of the theory in *Money and Foreign Exchange*, Professor Cassel devotes a chapter to setting forth qualifications. Obviously some were necessary to explain why actual exchange rates turned out in fact to be different from rates calculated on the basis of purchasing power parities. It is believed that all of the exceptions which Professor Cassel mentions can be reduced to the following seven. Exchange rates, he says, may be expected to deviate from calculated pars:

1. If for any reason domestic prices fluctuate in relation to one another, e.g., if beef goes up and pig iron down;[6]

[3] *Money and Foreign Exchange*, pp. 148–149.

[4] For simplicity the discussion is restricted to two countries.

[5] *Op. cit.*, p. 140.

[6] *Ibid.*, p. 154.

2. If tariffs and/or shipping costs change in relation to those prevailing during the base year;[7]

3. If obstructions to trade other than those mentioned in #2 are raised during the period under consideration;[8]

4. If there is a sudden devaluation of the currency, during the ensuing period of transition;[9]

5. If speculators are operating on the exchanges;[10]

6. If governments must have foreign exchange, regardless of costs, *e.g.*, in order to pay international debts;[11]

7. Finally (although this is not properly speaking a *qualification* to the theory), Professor Cassel continually reminds the reader that the base year must be selected with great care and that the proper price index is a general price index.[12]

A review of these qualifications, it is submitted, reveals plainly enough that they are many and of major importance. Indeed, the question may reasonably arise: Do they not completely emasculate the theory, stripping it of utility?

It seems to the writer that a critique of the theory can be simplified by considering the problems of the price level and of the direction of change. We shall discuss these problems in order. It is not necessary to point out that in this discussion we shall not be specially concerned with relationships that may exist between exchange rates and the relative purchasing powers of currencies on the gold standard.[13]

II

The Price Level. Here we are really concerned with two different things: (1) the question of the base year and (2) the problem of

[7] *Ibid.*, pp. 147, 148.

[8] *Ibid.*

[9] *Ibid.*, p. 150.

[10] *Ibid.*

[11] *Cf. ibid. et seq.*, wherein Professor Cassel describes German currency after the war; reparations and indemnity payments required Germany to purchase foreign currencies at supra parity rates.

[12] *Ibid.*, pp. 155, 156.

[13] Actually there is no reason why the purchasing power parity theory in so far as it is valid should not apply as well to gold standard as to inconvertible paper standard currencies. Professor Cassel himself states this in *Post-War Monetary Stabilization*, pp. 31–32. *Cf.* Viner's comments in *Studies in the Theory of International Trade*, pp. 381–382.

deciding what commodities should compose price indices to be used in calculating purchasing power parities.

1. Professor Cassel says of the base year: "It is only if we know the exchange rate which represents a certain equilibrium that we can calculate the rate which represents the same equilibrium at an altered value of the monetary units of the two countries."[14] In other words, we cannot know what equilibrium is now unless we have known what it was sometime in the past. To this proposition no one could object; there must indeed be a criterion.

Little reflection is necessary, however, to see the difficulties involved in the selection of the right year for a base year. Professor Cassel suggests that an equilibrium rate will become established after a period of normal free trade and mentions pre-war rates, presumably those prevailing in 1913, as being equilibrium rates. But, at least for the United States, 1913 is an unhappy choice, since the Underwood Tariff Act was passed in October of that year. The truth is there are not any normal years, and proponents of this theory should simply recognize the fact as an inescapable and necessarily disturbing factor in the equation.

The fact that international economic conditions seldom persist for any length of time without important changes would suggest that a given base year can reasonably be used to measure relative changes in price levels for only a few years. It may be admissible to use 1913 as a base year in measuring deviations in purchasing power parity in 1910 or in 1920 but not in 1935. For (to give but one reason) during long periods of time, domestic prices are certain to fluctuate in relation to one another and this would result in (see Professor Cassel's reason #1 above) a deviation of actual exchange rates from purchasing power parity rates.

2. Apart from the proper base year, one also has to decide what kind of price index should be used in determining true parities.

Many times Professor Cassel insists upon the *general price level*. For instance, in 1937, he said: "Some people believe that Purchasing Power Parity should be calculated exclusively on price indices for such commodities as form the subject of trade between two countries. This is a misapprehension of the theory. There is never any definite group of commodities that can be exported.

[14] *Money and Foreign Exchange*, p. 142.

Even a small alteration in the rate of exchange may widen or restrict the group of exportable goods. . . . The whole theory of purchasing power parity essentially refers to the internal value of the currencies concerned and variations in this value can be measured only by general index figures representing as far as possible the whole mass of commodities marketed in the country."[15]

This statement might have been directed against Mr. J. M. Keynes (among others) who, in *Monetary Reform*, recognized the fact that many types of goods were not traded internationally and that, consequently, changes in their prices could not possibly be expected directly to affect the exchanges.

Professor Cassel's position on this matter is curious and appears to be actually inconsistent with his initial explanation as to why currencies are traded. Demand for foreign currencies, it will be remembered, was said to arise from the desire of persons in, say, country A to buy goods from country B. But surely they will not want to purchase all of the different kinds of goods and services produced in another country. Consequently, not the fluctuations of *general* prices but only the fluctuations of certain prices can affect country A's citizens' evaluation of country B's currency. What concerns buyers of country B's currency is, according to Professor Cassel's initial explanation, exclusively the price flucuation of things or services produced in country B which these buyers want.

This insistence upon the necessity of using the general price index would lead one to suspect that Professor Cassel is holding in the back of his mind a firm belief in a crude sort of quantity theory of money, whereby an increase or decrease in the quantity of money effects a proportional rise or fall in all prices. Yet his acknowledgment of the fact that internal prices may, as a result of inflating the currency, change in varying degrees (qualification #1 above) is not consistent with such a belief. The writer has met with no success in attempting to square this apparent inconsistency in the theory. The only way out lies in supposing that in advocating the general price level as the means of determining purchasing power parities, Professor Cassel is referring only to long period trends or tendencies. That is, he may mean that

[15] *Post-War Monetary Stabilization*, p. 33.

eventually all prices will change proportionally to the change in the amount of money. If so, we ought to be told how long a "long period" is. But even this so-called "way out" is formidably obstructed by the fact that a change in the price level may *never* be followed by a proportional change in the prices of certain goods. If the change in the general price level is not so reflected, the "parity" existing before devaluation obviously can in no way be regained.

Concerning international trade commodities, this much is certain: Some commodities cannot reasonably be expected to be imported and exported, nor even bought in important quantities by foreigners, e.g., land and many kinds of durable goods.[16] So that even though Professor Cassel makes a point in saying, "There is never any definite group of commodities that can be exported," one could probably make up a list of commodities which for practical purposes are not competitive at all in international trade and whose prices are, therefore, not an important factor in the determination of exchange rates. It is the writer's conviction that all such non-exportable goods should be excluded from any price index used to measure purchasing power parity.[17] On this point it might be said further: not only do price changes in international trade goods cause different degrees of changes in the prices of other goods, they also effect different degrees of change in different regions of a nation. Thus their influence upon the general price level is, so to speak, twice removed.[18] Consequently, in the

[16] See R. F. Harrod, *International Economics*, (especially Ch. V), for a lucid statement of this point. Professor Erich W. Zimmermann suggests that although durable goods may be immobile, claims to them (title deeds, stocks, bonds, etc.) are not so, being bought and sold by foreigners just as commodities are, and that it is erroneous to speak, e.g., of fixed capital prices as having no effect on exchange rates. Although Professor Zimmermann's suggestion does not invalidate the general thesis here maintained, it is a point of great importance. Much the same may be said of Professor L. B. Zapoleon's suggestion that owing to improvements in marketing (transportation, communication, etc.) commodity prices are far more closely knit, more interdependent, than theorists have generally recognized (*Cf.* "International and Domestic Commodities and the Theory of Prices," *Quarterly Journal of Economics*, May, 1931). Differences in laws, customs and interest rates, both within and between nations, however, would lead one to expect short-run price differentials—even persistent differentials. The statistical study in Part II of this paper is offered in support of this thesis.

[17] *Cf.* other writers' division of commodities into "A," "B," and "C" groups in discussing this point—*e.g.*, G. Von Haberler, *The Theory of International Trade*, p. 34.

[18] See *op. cit.*, p. 29, for a similar idea originally attributable to Ricardo.

statistical analysis to be given below general price indices have not been used.

But even though an index of international goods' prices would appear to be a better criterion than Professor Cassel's index, one must admit there is some merit in his objection to the former. A change in the kinds of goods exported and imported over a period of time, as has already been suggested above, would clearly make comparisons based on them unreliable. That is to say, you cannot compare horses with horses-and-riders, which is the kind of thing an attempt to compare export-import goods (between the United States and England) of 1913 with those of 1925 would probably involve.

The near impossibility of comparing the qualities of goods bearing the same labels in different countries is another unavoidable hindrance to the drawing of valid conclusions. The fact that even in the same country a given label will in time come to describe a very different commodity only emphasizes the difficulties arising from the "quality" factor. As has been suggested, perhaps the best index would be one which excludes all goods likely never to enter into international trade. Unfortunately, none such exists. As a practical matter one must choose between a wholesale, a retail, a cost-of-living and a general price index. Because the wholesale index includes the least number of non-internationally traded goods it has been chosen for use in the study below, but chosen, be it emphasized, with full cognizance of its theoretical shortcomings as a criterion.

III

The Direction of Change. The next and more important criticism relates to Professor Cassel's assertion that when currencies are not on a convertible specie standard *it is parities which determine exchange rates.* On the whole he seems to overlook the possibility that the causal connection, or direction of change, may be just the reverse, namely, that price levels may be *acted upon* by changes in the exchange rates.[19] Since Professor Cassel's book (*Money and Foreign Exchange*) was published in English, a number of studies

[19] Von Haberler clearly notes this point but does not discuss it thoroughly. See his *Theory of International Trade*, p. 60.

of various currencies have been made.[20] These show that in fact in France, Germany, and Austria, changes in the price levels actually were effected by changes in the exchanges.

Professor Cassel acknowledges, in the fifth qualification mentioned above, that speculative activities might for a while cause a deviation in exchange rates not warranted by changes in the relative price levels, and that if speculators in exchange, for example, should undervalue country A's currency, this undervaluation might raise prices in country A. In this connection he cites post-war Germany. The admission, however, does not entirely save Professor Cassel's theory at this point, for one can easily think of other reasons why exchange rates might become active upon prices. Indeed, recently,[21] Professor Cassel has himself mentioned one, to wit: the franc was deliberately returned to the gold standard in 1928 at an undervaluation of 11 per cent in terms of sterling (parities being calculated on *wholesale* price indices). The object and effect of this action was to stimulate French exports and to raise domestic prices in France.

But there are yet other reasons, not connected with speculation and more important than either of Professor Cassel's, why the direction of change may be from exchange rates to price levels. These reasons are discussed below under the following headings:

1. Governmental monetary policies.
    a. Alterations of central bank rates.
    b. Stabilization funds.
    c. International government loans.
2. Private international loans.
3. Special considerations.
4. Purchases of foreign exchange by tourists and immigrants.

1a. Professor Cassel has not sufficiently considered the influence which fluctuations in interest rates (of whatever kind) can and usually do have upon the movement of capital funds and, through the latter, upon the exchange rates. A single example will suffice to show what is here meant. Suppose a central bank decides to

[20] J. H. Robinson, *The Process of Inflation in France*, Chap. VII; Eleanor Dulles, *The French Franc, 1914–1928*; J. Van Walre de Bordes, *The Austrian Crown*, mentioned by Angell in *The Theory of International Prices*.

[21] *The Downfall of the Gold Standard*, pp. 47–48.

raise the bank rate in order to curtail domestic credit expansion. Because owners of liquid capital seek the highest yield, and in so far as capital is free to flow internationally, obviously capital funds will flow into the country from abroad.[22]

Something of the sort happened in 1929 when the Federal Reserve Board attempted to control the stock market boom. Such flights of capital are immediately reflected in the exchanges. But the effects only begin with the exchanges; next, domestic prices of the country initiating the change in the central bank rate are affected. If gold flows in and is not "sterilized," prices in general will tend to rise; if the initiating country's currency is inconvertible, the prices of those things that the immigrant capital buys will rise. In both cases, a domestic price rise has been initiated by a change in interest rates, through a change in exchange rates.[23]

1b. Stabilization funds thwart the operation of the purchasing power parity theory. If for some reason country A's currency becomes depreciated, that is, if the domestic price level rises and there is no change in the price levels of foreign countries, according to the theory one would expect the exchanges to move against country A. But country A could prevent an adverse movement of the exchanges by making heavy purchases of its own bills of exchange. By pursuing an opposite policy country A could equally prevent appreciation of its currency in foreign exchange. Control by means of a stabilization fund can be maintained, of course, only so long as the fund lasts.

1c. Large scale loans through their effects on exchange rates affect price levels. What the effects will be depends upon the magnitude of the governmental loan, how the transfer of credits is carried out (the period of time), where the money is spent, and what for.[24] If, for example, enterprise in the borrowing nation

[22] Unless other central banks counter with equivalent raises in their rates. Even so the new rate may cause funds to flow in, since interest as a cost of production may be a less important factor abroad than at home.

[23] It is recognized that countries may prevent the movement of capital across national boundaries, as is the case in present-day Germany and Italy. The argument, of course, does not apply in such cases.

[24] The argument here follows that of Professor Taussig in *International Trade*, pp. 343 *et. seq.* For an elaboration of the point here noted see Carl Iverson's *Aspects of the Theory of International Capital Movements*, (2nd Ed.) especially pp. 320, 321; but all of Chapter VI is directly pertinent.

is primarily agricultural, and the money borrowed is spent in the lending country (say, for agricultural implements), and if production is near capacity at once commodity prices in the lending country will tend to rise. The borrowing country's currency will appreciate as a result of this price rise—all in accordance with the principles of the purchasing power parity theory. But if the borrowing country decides to spend the loan funds at home, this will require spending the loan funds in the purchase of the borrowing country's exchange which will result in (a) appreciation of the borrowing country's exchange together with (b) rising domestic prices—an upshot not compatible with purchasing power parity theory.

2. Private international loans may be expected to have the same effect as governmental loans if expended in the same way.

3. A general flight from a currency can and has come about for other reasons than loss of faith in the currency, or as a result of what Professor Cassel calls speculative activities. If large holders of capital in a country decide that their own future prospects for profit making in the home country are poor, they may transfer their holdings to another country by making purchases of foreign currencies regardless of purchasing power parities.

Assume normal exchange rates of 5 (country A) to 1 (country B) when price levels in both countries are at 100. Now suppose a 20 per cent rise in the prices of country A and no change in country B's. The theory would require the exchange rate to move against A, from 5 to 1 to 6 to 1. But if important financial interests in country A, fearing persecution, should decide to transfer their holdings to country B, the exchanges might move against country A as much as 7 to 1, which would be *more* than in proportion to the change in purchasing power parities. It is not necessary to repeat that this change in exchange rates may very well have repercussions on the two countries' price levels.

4. Finally, tourists' expenditures and immigrants' remittances involve the purchase of foreign exchange without important regard for the relative purchasing power of currencies. This point is discussed below in section IV, 1a.

To summarize this theoretical critique, Professor Cassel's theory states that exchange rates are determined by the relative

purchasing powers of currencies, when the latter are on an inconvertible basis, and that changes in rates are exactly correlative with changes in purchasing parities. He acknowledges certain exceptions to this rule. An attempt has been made to show that still other qualifications to the theory are necessary if it is adequately to conform to reality. Taking all *theoretical* qualifications into consideration, it is the writer's belief that the theory does not provide a very useful way of explaining either what has happened or what is likely to happen to exchange rates.

IV

Statistical Test. The accompanying charts show the relation between fluctuations in actual exchange rates and "calculated rates"—rates calculated, that is, on a basis of purchasing power parities. The year 1926 was used as base year in both the English and French comparisons.

This year was chosen not because it was thought to be normal. Next to 1913, however, it appears to have been of all years since then the most nearly normal. More than that, published index numbers are for the most part based on 1926 figures. Lastly, considering the period studied (1919-1936), 1926 seemed better than 1913 because of its relative proximity. The vast changes in national and international trade which have taken place since the war make 1913 seem very remote.

The writer is aware that the tables and the deductions made therefrom are quite simple. Since the "wholesale price level" is itself a not entirely satisfactory instrument for determining parities, as was suggested in Part I above, refinements were not considered worth while.

1. FRANCO-AMERICAN RATES

In Figure I, the solid line represents "calculated rates," or exchange rates that would have prevailed if they had been exactly governed by purchasing power parities.[25] The broken line,

[25] It has been deemed advisable to present this statistical material in the form of charts rather than tables in the interest of printing economies. The basic data were obtained from Standard Statistics Company reports; the writer is responsible for calculations of parities and the drafting of the charts.

labeled "no lag" in the legend, shows the actual exchange rates. All statistical tests of Professor Cassel's theory known to the writer consist of a comparison of the figures represented by these two lines. If the actual rates differ from the calculated rates, this is said to constitute a discrepancy. The one, two, and three months' lag lines have been added in this test. The figures from which they are derived are the same as those used for the "no lag" line, but they have been set up to show a *lag* of one month, two months, and three months, respectively. It is believed that allowance for a lag of a month to three months between changes in purchasing power parities and exchange rates will bring out the closest correlation that is possible without actually doing violence to the theory. Not to allow a lag is to suppose that changes in domestic price levels will be immediately acted upon by foreign buyers. It seems more reasonable to suppose that price changes of many articles are acted upon only after some weeks. A brief summary of what is revealed by comparisons on both no-lag and lag bases follows:

a. *No-lag comparison*. Comparing calculated parities with actual (no-lag) rates, it appears that from January, 1919, through September, 1920, the franc was overvalued by American buyers. A few months of undervaluation followed. In January, 1921, overvaluation was resumed and (excepting the month of January, 1924) maintained until January, 1926. During this year the franc was undervalued for the first nine months. From October, 1926, through 1936 it was overvalued.

Since during the war exchange rates were maintained by pegging, we may, in view of Professor Cassel's admitted qualifications, disregard the year 1919 when upon being unpegged the franc experienced a rapid plunge.

From then on, however the figures seem to indicate that the franc has been fairly consistently *overvalued*, the only notable exception being the very year chosen as base year, 1926. Are the deviations of actual exchanges from calculated pars owing to the choice of base year? Possibly yes. But if we had chosen another year, say, 1927, deviations would nevertheless have remained, although they would have been less glaring and would have occurred in different periods. Regardless of this, 1927 in the

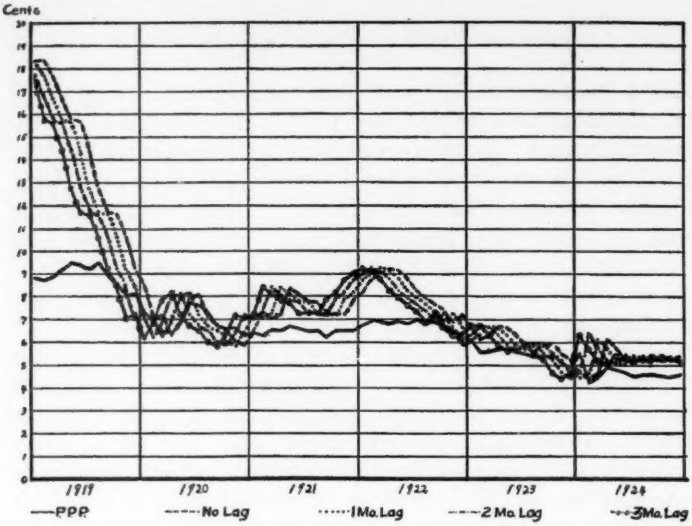

FIG. I. A COMPARISON OF FLUCTUATIONS IN FRANCO-AMERICAN PURCHASING POWER PARITY AND EXCHANGE RATES, 1919–1924

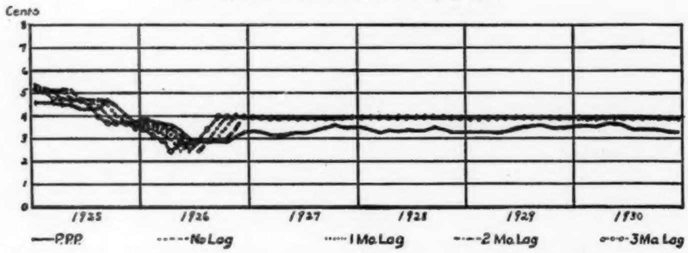

FIG. II. A COMPARISON OF FLUCTUATIONS IN FRANCO-AMERICAN PURCHASING POWER PARITY AND EXCHANGE RATES, 1925–1930

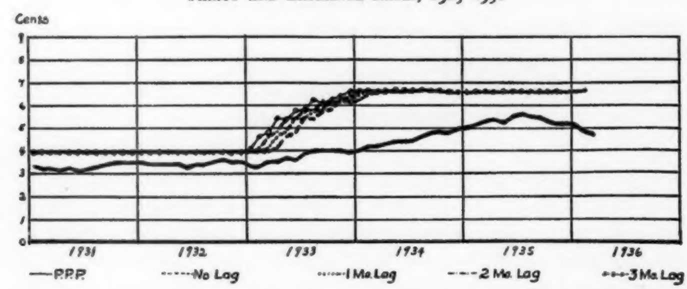

FIG. III. A COMPARISON OF FLUCTUATIONS IN FRANCO-AMERICAN PURCHASING POWER PARITY AND EXCHANGE RATES, 1931–1936

United States was not a normal year, as it was characterized by a minor depression.

In connection with this comparison it is interesting to note that Professor Eleanor Dulles has presented a chart comparing calculated parities with actual rates in which the franc appears after 1920 to have been consistently undervalued in terms of dollars.[26] As this is the reverse of the present writer's findings an explanation should perhaps be made. The base year used by Professor Dulles was not 1926 but the monthly average for July, 1914. Owing to the fact that hostilities had already broken out in Europe, such a base would not appear to be any better than either 1913 or 1926. But on the basis of her figures she may well have been justified in stating that after 1921 the franc "was worth one or two cents less than its purchasing power would have justified" (p. 25). She explains the deviation as a result of the continual influx of United States capital investment, prices of which were not included in the wholesale price index used for computation. In other words, France, in her eagerness to get foreign capital (dollars), was willing, or rather forced, to pay a premium for them.

In defense of the present writer's findings, that after 1920 the franc was generally *overvalued*, it might be pointed out that American tourist expenditures constituted a heavy, immediate and steady demand for franc exchange calculated to result in a dollar valuation of the franc far in excess of the rate justified by the relative price levels. In fact, both Professor Dulles' contention and the one just stated may be true, as the tests are not exactly comparable. The prices of the capital investments were hidden. Since they were not included in the price indexes, the actual dollar price of francs appeared too low;[27] the tourists' expenditures being evident made the franc appear overvalued. One might suppose that the two analyses would have agreed (i.e., indicated an overvaluation) if the prices of investments had been included in Professor Dulles' price indices. It is doubtful, however, that the inclusion of the prices of investments in Professor Dulles' computations would have entirely eliminated the discrepancies,

[26] See Eleanor Dulles, *op. cit.*, p. 22. A similar result is reached by J. H. Rogers, *The Process of Inflation in France.*

[27] See the discussion in 1a and 2 of Part III above.

because of the fact that the relative importance in international trade of goods composing the indices greatly changed between 1914 and 1926, that is, between the two base years used. Besides, to include prices of investments in her index and not in the writer's would again put us in the position of attempting to compare incomparables. But the difference in findings is really of secondary importance. Both show clear deviations from calculated pars and these deviations are not adequately explained by the theory.

It is possible, however, that neither of these tests does justice to the theory. Neither, at any rate, takes account of the fact that in the nature of things there must be a slight lag between the occurrence of price changes and changes in the exchange rates. Now let us see what differences appear in comparing calculated parities with the actual rates set up on a one-month lag basis.

b. *One-month lag comparison.* The overvaluations of 1919 can again be ignored. In 1920 the franc was undervalued for six months. From December, 1920, until September, 1925, (with the exception of two months) the franc was overvalued. Undervaluation was maintained from that time until September, 1926. But from then on through 1936 the franc was again overvalued. In short, this comparison gives results not much different from the no-lag comparison: the franc was generally overvalued.

c. *Two-months lag comparison.* As in the preceding comparison, the franc was overvalued through November, 1919. During the ensuing year it was undervalued nine months, overvalued three months. From December, 1920, through September, 1923, (with the exception of one month), the franc was overvalued. There followed a four-months period of undervaluation, ending in February, 1924. Then comes a nineteen-months period of overvaluation followed by a ten-months period of undervaluation. Beginning in July 1926 overvaluation was resumed and maintained for ten consecutive years. Obviously, on this two-months lag basis, we have much more frequent change from over- to undervaluation than in the two preceding cases.

d. *Three-months lag comparison.* A comparison made on a three-months lag basis also shows some differences. From January, 1920, to December, 1936, the franc appears undervalued during 28

months. Most of these undervaluations occurred in 1920, 1923 (5 months), 1925 (5 months), and 1926 (6 months). This is to be compared with 15 months of undervaluation on the no-lag comparison, 18 months of undervaluation in the one-month lag comparison, and 24 months of undervaluation in the two-months lag comparison.

Other differences are illustrated for the sake of brevity in accompanying tables.

In each instance above a majority of the deviations occurred after the United States went off the gold standard in 1933, and most of the other deviations were bunched in the depression of 1921–22. The significant point illustrated in Table I, however, is that *the deviations from parities are somewhat less violent when the comparison is made on a one-month lag basis, than when the other bases are used.*

TABLE I

NUMBER OF ONE CENT OR MORE DEVIATIONS FROM CALCULATED PARITIES JANUARY, 1920–1937

No lag	49 months
One-month lag	39 months
Two-months lag	52 months
Three-months lag	56 months

The longest period of stability in exchange rates on all four bases of comparison was between January, 1927, and January, 1933 (6 years). Although the franc then appeared overvalued the overvaluation remained constant at about one-half cent or 14 per cent. This is a sizeable discrepancy. It seems very doubtful indeed that exchange rates could have been governed by purchasing power parities during this period. If proponents of the purchasing power parity theory argue that deviations from parity are to be expected in abnormal, depression years they must explain why in the depression of 1921–22 the deviations were considerable and inconstant, while from 1929 to 1933 the deviations were small and constant.

To sum up the Franco-American analysis: even when comparisons between purchasing power parities and actual exchange rates are made on one, two, or three-months lag bases only a little more

support is given to the theory than when no-lag figures are used. Use of lag bases results in an increase in the number of movements from overvaluation to undervaluation, but the gyrations around purchasing power parity appear less violent.

2. ANGLO-AMERICAN RATES

a. *No-lag basis.* The pound sterling appears to have been overvalued during most of 1920, all of 1921 to July, 1922, from March through July of 1923, all but one month in 1924, the first ten months in 1925, and from July, 1926, through August, 1927. From then until November, 1933, the pound was undervalued—a period of six years. Indeed, with the exception of six scattered months, the pound was undervalued from August, 1927, to the end of the period, May, 1936, or for *nine years.* In a total of 195 months the pound was ***overvalued*** during 86 months, ***undervalued*** during 106, and exactly at purchasing power parity during 3 months.

TABLE II

NUMBER OF 10 PER CENT DEVIATIONS FROM CALCULATED PARITIES
JANUARY, 1920 TO MARCH, 1926

No lag	33 months
One-month lag	38 months
Two-months lag	40 months
Three-months lag	40 months

b. *Lag bases.* The comparison of actual exchange rates with calculated parities on a one-month lag basis shows more months of overvaluation than on the no-lag basis, being 88 as against 71. But on both two- and three-months lag bases the figures are 75 as against 71 for the no-lag basis. Undervaluations were recorded in 106 months on the no-lag basis, in 106 months on a one-month lag basis, and in 120 on the two-and three-months lag bases.

The least number of deviations from parities in the Anglo-American comparison is on the no-lag basis. This contrasts with the Franco-American figures (Table II), where the one-month lag basis gave the least number of deviations.

Regardless whether lag or no-lag bases were used, most of the Anglo-American deviations occurred immediately after Britain's

desertion of the gold standard in September 1931. The remainder were bunched in the depression of 1921 and in the early months of 1935.

Outstanding in these Anglo-American figures is the long period of undervaluation, almost without exception during the nine years following August 1927. In 26 months of this period the undervaluation was as much as or more than 10 per cent on the no-lag basis. On the one-month lag basis important undervaluation occurred in 27 months; on the two-months lag basis in 23 months; on the three-months lag basis in 24 months.

But perhaps the main point to be emphasized here is that the United States appears to have been *undervaluing* the pound sterling during the same period that it was *overvaluing* the franc. In both English and French comparisons, for a long period of time, through American prosperity and depression, there were deviations of actual exchange rates from calculated parities even when the comparison is made with lag bases. This is damaging statistical evidence against the purchasing power parity theory.

The analysis of the tables given herein could be further refined and other observations made, but it does not appear that this conclusion would thereby be notably altered—that Professor Cassel's theory finds meager support from a statistical analysis designed to show it in the most favorable light possible.

The enquiry leads to this conclusion: Although there may often be a tendency for exchange rates to be governed by relative price-level ratios, we cannot look to the latter alone for an adequate explanation of the former. Furthermore, none of Professor Cassel's qualifications have been stated in such form as to enable one to predict movements of exchange rates, nor to control their movements within narrow limits, nor even to account for them adequately *ex post facto*.

The purchasing power parity theory does not reveal the many forces which are at work upon the exchanges, and it assumes a greater validity of reasoning from price-level concepts than exists.

This is not to detract from the real service Professor Cassel's theory has rendered economic thinking. He was perfectly correct in saying that internal depreciation of currencies in post-war Europe directly affected the exchanges, and that people could

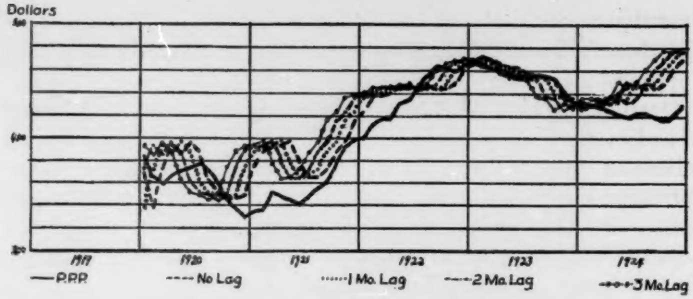

Fig. IV. A Comparison of Fluctuations in Anglo-American Purchasing Power Parity and Exchange Rates, 1919–1924

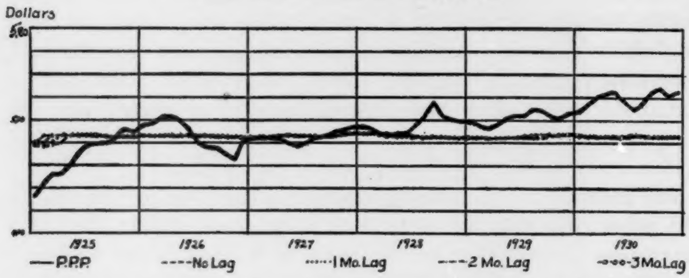

Fig. V. A Comparison of Fluctuations in Anglo-American Purchasing Power Parity and Exchange Rates, 1925–1930

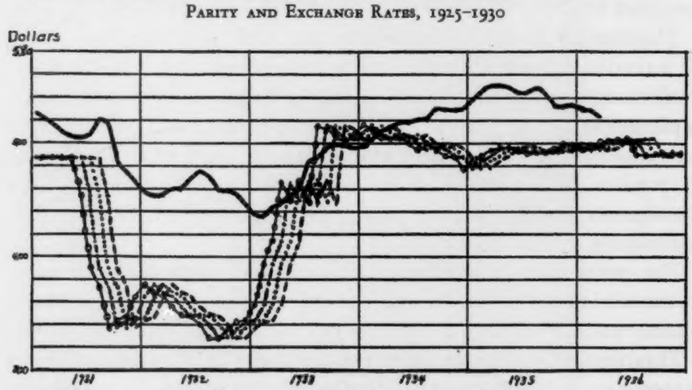

Fig. VI. A Comparison of Fluctuations in Anglo-American Purchasing Power Parity and Exchange Rates, 1931–1936

expect the exchanges to revert automatically to pre-war ratios only by ignoring the fact of such domestic depreciation. In other words, he expounded a theory which laudably attempted to dispel popular illusion, and which did emphasize the relation of the domestic purchasing power of currencies to their international purchasing power. But an adequate explanation of the relation of exchange rates to parities requires a considerably more complicated analysis than Professor Cassel's theory provides.

WAGE REDUCTIONS AND EMPLOYMENT*

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This discussion of the relation between wage reductions and employment will be treated under six headings as follows: (1) pre-war and post-war orthodoxy; (2) the capital scarcity theory and its critics; (3) deflationary and inflationary marginal productivity theory; (4) imperfect competition and excess capacity; (5) pragmatic wage reduction arguments; and (6) employment theory and general wage theory.

I

Until the recent rise of interest in theories of imperfect competition and of purchasing power, the marginal productivity theory of wages was virtually unchallenged among the exponents of "pure" economic theory. True, there were many criticisms, but those who attacked marginal productivity theory were chiefly philosophical-historical economists like Veblen and "amateur" economists like Kautsky and the Webbs.

Not all the advocates of marginal productivity theory, however, seem to have realized the logical implications of their doctrine. In spite of their teaching that there was a wage at which all labor could be employed—the marginal productivity wage—, even the orthodox leaders did not think that too high wages were the chief cause of unemployment.[1]

Perhaps one reason why orthodox economists of this period did not charge unemployment chiefly to faulty wage policy was that

* During the summer of 1937 the author aided Professor C. B. Hoover in the preparation of material for his forthcoming book on the economics of purchasing power. This paper is drawn partly from that material and partly from the suggestions and criticisms of Professor Hoover.

[1] In one passage (*Principles of Economics*, p. 709) Marshall even stated that recovery was accompanied by rising *real* wages, and apparently did not realize that in making such a statement he was denying the validity of the ordinary type of marginal productivity analysis.

wage stickiness was not nearly as pronounced then as it has been since the war. A reason that seems at least as important, however, is that unemployment was then considered almost entirely a depression phenomenon. Economists studied "cycle theory", and thus "unemployment theory", largely as if it were something distinct from the "pure theory" of value and distribution. Imperfect foresight, business psychology, and deficiencies in monetary policy were stressed, rather than the "real" forces of diminishing utility and diminishing returns.

In the years since the war, confronted with changed conditions, economists have centered their attention upon the comparative stickiness of wage rates in economies where the general level of prices is far from sticky. Likewise, in the face of long existing unemployment they have felt that, in order to explain that unemployment, they have to do more than describe the upward and downward movements of the business cycle.

Orthodox economists have tried to fit cyclical behavior and other "abnormal" aspects of post-war conditions into the regular pattern of equilibrium wage theory. Realizing the implications of marginal productivity teachings, they have laid great stress upon too high wages as a cause of both cyclical and seemingly permanent unemployment.

Economists with unorthodox leanings have instead tried to modify "pure" theory so as to make it consistent with their arguments concerning particular problems. Some desire merely to show how monetary and psychological uncertainties render impossible predictions of the results of wage and interest rate changes. Others, emphasizing bargaining power and unused capacity, would reduce marginal theory to an abstraction having little significance for the real world.

Interestingly enough, at almost the same time that the old orthodoxy began to experience serious attacks, a new orthodoxy, an ally to the old, raised its head. Making use of the Böhm-Bawerkian theory of capital, the Vienna-London school of thought, headed by Ludwig von Mises and F. A. von Hayek, developed their capital scarcity theory of cycles and employment, which, like the older orthodoxy, placed the chief blame for unemployment upon too high wage rates. Although the theory itself

was new, the fact that its Böhm-Bawerkian progenitor had long been accepted as orthodox, enabled the new school to present its beliefs as a part of the established body of orthodoxy.

Between the exponents of the new and the old orthodoxies, between the marginal productivity and the capital scarcity theorists, there has been neither firm alliance nor consistent opposition. The leading exponents of the newer theory seem to take marginal productivity teachings for granted, as truths which do not need to be questioned.[2] But such outstanding marginal productivity theorists as Edwin Cannan, A. C. Pigou, and J. R. Hicks are numbered among the critics of their new allies.[3]

II

The Mises-Hayek theory does not concern itself with individual wage rates; instead it inquires into the total sum of funds that constitutes the national wages bill.[4] It is, as its exponents have been willing to admit, merely a twentieth century version of the wages fund doctrine:[5] unemployment is seen as due to a lack of capital, and this lack of capital is thought due to the presence of too high wage rates (both obvious wage rates and other labor income, such as social security payments).

According to this theory, as it is briefly and clearly presented in von Hayek's *Prices and Production*,[6] the level of business activity is determined by the volume of investment in the more capitalistic lines of production, and this in turn is determined by movements in the market rate of interest. As long as the natural rate and the market rate of interest remain the same, the economy remains in equilibrium, but when monetary policy causes the market rate to fall below the natural rate, an inflationary boom takes place and eventual unemployment is inevitable.

A fall in the market rate below the natural rate of interest, the

[2] F. A. von Hayek, ed., *Collectivist Economic Planning* shows that von Mises and von Hayek believe the marginal analysis essentially realistic.

[3] Cannan in "Too Little Saving", *Economic Scares*, and Hicks in "Gleichgewicht und Konjunktur", *Zeitschrift fur National Oekonomie*, pp. 441–455, expressly criticize the Vienna theory. Pigou has indirectly criticized the Vienna theory in his advocacy of public works.

[4] This is interesting in view of von Hayek's criticism of all concepts of economic averages and aggregates in Lecture 1 of *Prices and Production*.

[5] Lionel Robbins, "Consumption and the Trade Cycle", *Economica*, November, 1932.

[6] Especially see Lectures 3 and 4.

A fall in the market rate below the natural rate of interest, the theory continues, means that added investment is taking place through forced instead of through voluntary savings; business men are using new bank loans to bid up the price of productive resources and thus also to force up the prices of consumers' goods. Since consumers' incomes rise only slowly, the volume of consumers' real purchases falls; resources no longer used in consumers' goods industries are made available for investment in the more capitalistic producers' goods industries. As long as the volume of bank credit increases more rapidly than competition forces up consumers' incomes (chiefly wages), forced saving and new investment continue. But sooner or later the increase in bank credit is checked; consumers' incomes increase more rapidly than the volume of funds available for investment; real savings decline; the rate of interest rises; and entrepreneurs are unable to complete investments already begun in the more capitalistic lines of production. Since not all of the resources used in these more capitalistic lines can be transferred quickly, there exists unemployment, both of men and of capital equipment.

It is better, argues Hayek, to prevent unemployment by preventing the original forced savings. But once unemployment is present, the only way to reduce it is to lower the market rate of interest and thus make investment in the more capitalistic lines once again profitable. This could be done through monetary policy, but the net result would merely be the old cycle of forced savings and unemployment again. In order to have permanent relief, the economy must finance added investment through added voluntary savings. Since profit receivers save the greatest percentage and wage earners the smallest percentage of their incomes, the most practicable way of increasing voluntary savings is to reduce money wages.

In fact, wage reductions will diminish not only cyclical, but also seemingly permanent unemployment, such as has existed in England, Germany, and Austria since the war. The chief cause of this unemployment has been a prolonged scarcity of capital, caused in turn by a too great diversion of funds into wages and governmental expenditures on social services and public works.[7] Not

[7] For the application of this theory to conditions in a particular country, see Nicholas Kaldor, "Capital Consumption in Austria", *Harvard Business Review*, 1932.

until the volume of consumptive expenditures is lowered, Hayek concludes, can the major industrial nations enjoy real prosperity.

In his recommendations concerning wage policy, Hayek thus lays exclusive emphasis upon the volume of savings and the rate of interest. The truth or falsity of his theory rests not at all upon the actual relationship between worker compensation and worker productivity, but upon the realism of his assumption that all monetary income not consumed will be invested.

This assumption has been challenged by several groups of economists. Edwin Cannan, D. H. Robertson, J. R. Hicks, and A. C. Pigou have all gone on record as favoring lower wages in order to increase employment,[8] but they have also either directly or indirectly criticized the Hayekian theory;[9] they want lower wages, but lower wages accompanied by a *greater* volume of consumers' real purchases, as they think that during depressions a decrease in such purchases may easily have unfortunate results.

Of all the critics of capital scarcity theory, John Maynard Keynes, however, has given perhaps the most concise and complete statement of his objections.[10] Keynes analyzes the results of money wage reductions as follows:

The primary results are a decline in the propensity to consume, a fall in the rate of interest, and certain entrepreneurial expectations concerning future wage and price movements. The decline in the propensity to consume tends to discourage investment and increase unemployment; the fall in the rate of interest tends to encourage investment and decrease unemployment; entrepreneurial expectations may provoke reactions of either nature, and are the most important of the determining forces. During depression the most probable expectations aroused by wage cuts are expectations of still further wage and price cuts; the business man

[8] Edwin Cannan, *op. cit.*, "Not Enough Work for All"; J. R. Hicks, *The Theory of Wages*, pp. 139–233; D. H. Robertson, "The World Slump" in *Economic Essays and Addresses*, by A. C. Pigou and D. H. Robertson; A. C. Pigou, *The Economics of Unemployment*, pp. 247–315.

[9] For Cannan, Hicks, and Pigou, see above, footnote 4. Robertson directly attacks the von Hayek-Robbins thesis that consumption expenditures were too high in 1930, in his review of Robbins' *The Great Depression*, *Economica*, 1935, p. 103.

[10] The best of Keynes' various statements is not in any of his articles chiefly directed against the capital scarcity theory, but in *The General Theory of Employment, Interest, and Money*, which was chiefly intended as a criticism of the old Cambridge orthodoxy represented by Pigou.

is afraid to invest; and the decline in the volume of consumers' purchases drags the economy deeper into the slough of the depression.

Akin to Keynes' theory is the one presented by Bertil Ohlin,[11] who thinks that in times of depression, the fall in purchases resulting from a wage cut will probably add to the actual interest figure a risk premium greater than the fraction-of-a-percentage drop expected to take place in the "pure" interest rate. Both Ohlin and his Stockholm colleagues stress the unpredictability of economic behavior and the necessity of taking into consideration entrepreneurial *and consumer* expectations.

In this argument between the capital scarcity theorists and their critics, what recent statistical evidence is available does not seem to support the former group's contention that a decrease in consumptive and governmental expenditures will bring about recovery. Rather than encouraging investment by lowering the interest rate, the diminutions of expenditures after 1929 seem to have had the effects noticed by Ohlin and Keynes: those of frightening investors even more and making the deflationary spiral ever deeper. The interest rate failed to play its appointed role.[12]

III

Hayek's theory is concerned only with wage totals. The other leading theory which accuses too high wages of causing unemployment instead stresses the relationship between worker compensation and worker productivity; it rests its whole argument upon the principle of diminishing returns.

Adherents of diminishing returns, or marginal productivity, theory may be said to be divided into two types: the deflationary and the inflationary. In the former, which may be termed the "more orthodox" group, A. C. Pigou and the late Edwin Cannan are outstanding figures. Of the latter, or "less orthodox" group, J. M. Keynes seems to be the leader.

According to marginal productivity theory, under conditions of

[11] See Bertil Ohlin, "Some Notes on the Stockholm Theory of Savings and Investment", *Economic Journal*, March and July, 1937; also Brinley Thomas, *Monetary Policy and Crisis: A Study of Swedish Experience*.

[12] As several economists have pointed out, the so-called "natural" rate of interest, the one equal to prospects of profits, was a negative one.

perfect competition and increasing marginal costs, each worker will be placed where he will add the greatest net product to the national dividend, and will receive a wage equal in value to that product. The relationship between marginal cost and price is one of identity and there can be no unemployment.

So far both the deflationary and the inflationary adherents of marginal productivity are in agreement. They also agree that if real wages are higher than the competitive level, unemployment is the inevitable result, and that real wage reduction is necessary for a return to equilibrium.[13] Where the deflationists and the inflationists disagree is in the method of bringing about real wage reduction. Pigou, Cannan, and the other deflationists prefer money wage cuts; Keynes and the inflationists think such a method worse than useless, and propose stable money wages accompanied by rising prices.

Although Pigou's wage goods explanation of marginal productivity[14] has been chosen by Keynes as the best complete statement of the deflationary point of view, Cannan's simpler and shorter money-wages explanation[15] is perhaps more akin to the theory held by the average orthodox economist.

According to Cannan, the cause of general unemployment is the same as the cause of unemployment in a particular industry: products are priced too high for consumers to purchase enough to insure full employment. If wage earners sold their products directly to the public, instead of receiving their incomes through the media of the entrepreneurs, they would realize more easily that too high wages are the chief cause of unemployment. The remedy for unemployment is simply lower wages, which will allow lower prices and thus a larger volume of purchases, production, and employment.

Keynes' criticism of this argument is somewhat more complicated, and is the same as the criticism of the capital scarcity theory summarized above: the most probable result of a wage cut is the

[13] Orthodox theory does not state, of course, that too high wages *in one industry alone* will cause unemployment. It states that such a condition will merely result in a transfer of labor from a more to a less favorable employment, and that too high wages *in most industries* must be present before there is general unemployment.

[14] *The Economics of Unemployment.*

[15] "Not Enough Work for All".

expectation of other wage and price cuts and a deepening of the deflationary spiral. Stated in marginal productivity terms, his criticism is: a reduction in money wages will probably lead to such a fall in prices that real wages will actually rise; it is only rarely possible to secure lower real wages by cutting money wages.[16]

The constructive criticism which Keynes makes is that real wages can be lowered by means of a monetary policy which raises prices. As he sees it, the supply curve of labor is not a function of real, but of money wages; while unions resist downward pressure on money wages, they do not resist—at least in the early stages of recovery—diminutions of real wages brought about by a rising price level.

This assumption of Keynes' has been attacked by both D. H. Robertson[17] and Herbert Simpson.[18] Robertson's comment is that unemployment is caused, not so much by labor's insistence upon a certain money wage, as by its determination to receive a good-sized proportion of the total social income. And Simpson remarks that, while depression-weakened unions can be *forced* to accept wage cuts, recovery-strengthened unions will be in a position to see that prices do not rise any more rapidly than wages.

Simpson and other New Deal critics also attack what Keynes himself admits may be a weak spot in his theory: the role of business confidence in bringing about business recovery.[19] The charge that governmental monetary manipulation frightens business enterprise and discourages investment seems to have replaced in popular favor the earlier objection that such manipulation usually leads to runaway inflation.

In thus bringing in the matter of business confidence, the deflationists introduce, under another name, the problem of expectations stressed by anti-deflationists such as Ohlin and Keynes. And in bringing in the matter of trade-union strength, they intro-

[16] Pigou denies that money wages can fall without real wages falling also. See "Real and Money Wage Rates in Relation to Unemployment", *Economic Journal*, September, 1937.

[17] "The World Slump".

[18] *Purchasing Power and Prosperity*.

[19] Certain economists who have been rather friendly to the New Deal have also emphasized this matter of business confidence. See J. M. Clark, "Aggregate Spending by Public Works", *American Economic Review*, March, 1936.

duce the element of bargaining power as one of the forces determining wages. By introducing these two elements, the deflationists gain in realism, but they destroy the simplicity of the original form of the wage-reduction argument, and shift the discussion from the field of inevitable results to that of probabilities.

Which of those probabilities will be realized seems almost impossible to predict from a study of recent happenings. Keynes seems justified in his statement that money wage cuts will not bring about recovery; from 1929 to 1933 American manufacturing money wages fell almost as much as did manufacturing prices, yet the volume of manufacturing employment was cut almost by half;[20] certainly an occurrence such as that is not in keeping with the teachings of the deflationist school. Yet the deflationists also seem largely justified in their remarks concerning "business confidence"; the recent American business recession is evidence that all has not worked as was planned in the inflationary, "pump-priming" scheme.

IV

The dispute between the deflationists and the inflationists is, after all, one over monetary policy, rather than over fundamental wage policy. The real opposition to wage reductions comes, not from the Keynesian school, but from those who believe that wage rates are indeterminate, rather than determined by Marshallian curves or Cassellian equations. Economists who hold such a theory usually stress the existence of imperfect competition and unused capacity.

Unfortunately, while arguments based upon imperfect competition and excess capacity have frequently been advanced, there seems to be no complete statement of the theory underlying these arguments. In several passages, George Soule supplies evidence that he holds such a theory, but he does not state it in its entirety.[21] Joan Robinson and Edwin Chamberlin show why marginal productivity theory does not explain wages under conditions of im-

[20] Averaged together (wages weighted as 70 per cent), manufacturing wage rates and raw material prices fell slightly more than did manufacturing selling prices. Wage rates fell 22 per cent, raw material prices 51 per cent, selling prices 31 per cent (F. C. Mills, *Prices in Recession and Recovery*, pp. 296–309).

[21] See, for instance, his footnote in F. C. Mills, *Prices in Recession and Recovery*, p. 24.

perfect competition, but do not apply their conclusions to cyclical wage policy.[22] Jacob Viner perhaps states these unorthodox points of view as well as anyone when he says that during depression plants are operated at far below full capacity and hence are not operated at increasing marginal costs; and that wages depend at least as much upon the profit-and-loss statement of the firm as upon the marginal productivity of labor.[23] Viner, however, is in favor of money wage reductions, for reasons stated below.

But if there exists no complete statement of cyclical wage theory based upon imperfect competition and excess capacity, at least such a statement can be pieced together from implications of statements which have been made. Such a synthesis might be phrased as follows:[24]

If either lower money wages or stable money wages with higher prices are necessary for increased employment to take place, then this necessity must arise from the nature of the price-marginal cost relationship. Price and marginal cost must either be approximately equal, or else tied together in such a way that entrepreneurs will allow no disturbance of the relationship. Likewise, plants must be operating at increasing marginal costs.

If price and marginal cost are equal, and if plants are operating at increasing marginal costs, it is obvious that increased employment necessitates lower real wages. If the latter condition, that plants are operating at increasing marginal costs, is retained, but the former condition, that price is equal to marginal cost, is dropped, then there are at least two different types of possibilities.

If entrepreneurs pursue stable price policies, then an increase in demand will cause increased output at the same price. Since price at the start is greater than marginal cost, this increased output will not be produced at a loss even if money wages remain the same. In such a case, at least some reemployment can take place at stable

[22] Joan Robinson, *Economics of Imperfect Competition*, pp. 235–307; Edwin Chamberlin, round table discussion on imperfect competition, *Supplement* to the *1934 American Economic Review*, pp. 23–37.

[23] "Mr. Keynes on the Causes of Unemployment", *Quarterly Journal of Economics*, November, 1936.

[24] In the following synthesis, use is made of the ideas of Viner, Chamberlin, Robinson, J. M. Clark, (see below) and C. B. Hoover (see title note).

real wages; the extent of reemployment which can take place will depend upon the extent to which price was originally higher than marginal cost.

If entrepreneurs carefully adjust prices according to the text-book principles of monopoly pricing, the pressure of increased demand will make prices rise. Successful agitation for higher money wages will probably lead to still higher prices, and hence to contracted sales and output. Here an attempt to maintain stable real wages will definitely act as a check to reemployment.[25]

Thus, whether or not the existence of imperfect competition invalidates the argument for lower real wages, depends upon the type and the extent of the imperfection present. Since most firms probably do not adjust prices according to the text-book principles of monopoly pricing, but instead try to establish prices for a fairly long period of time, it is probable that, even if plants operate at increasing marginal costs, considerable reemployment can take place at an unchanged rate of real wages. If marginal costs are increasing, however, sooner or later an increase in employment will necessitate a fall in real wages.[26]

If plants do not typically operate at increasing marginal costs, the wage rate arguments derived from marginal productivity theory will have to be even further modified. No firm operating at constant or decreasing marginal costs will pay marginal productivity wages. It cannot do so and remain a going concern; marginal productivity wages would absorb all, or more than all, the gross product above non-labor variable costs. Even a firm operating at very mildly increasing marginal costs cannot pay marginal productivity wages and hope to have a sufficient return to

[25] E. H. Chamberlin, *loc. cit.*, makes a very useful distinction between *physical* "marginal product" and "marginal value product" to aid in showing why wages will not be equal to marginal product when pricing takes place according to the principles of monopolistic competition. Since, under conditions of monopolistic competition, an addition to output means that all the output must be sold at a lower price, increase in physical output is not accompanied by a proportionate increase in gross revenue. Hence the "marginal value product" of a worker is necessarily somewhat less than his physical "marginal product" multiplied by the sales price per unit of that product. Cf. also the discussion by H. L. McCracken, *Southern Economic Journal*, October, 1938, pp. 167–71.

[26] Even if production did take place at increasing marginal costs over a short period of time, if technical improvements took place rapidly enough increasing employment would never necessitate lower real wages.

capital to keep that firm in existence. Workers receiving wages lower than their marginal product are not necessarily "exploited"; where significantly increasing marginal costs are not to be found, imperfect competition and administered wages *must* exist, and wages *must* be below the marginal productivity level.

Recent American experience seems to offer support for such a theory of imperfect competition and excess capacity as has been outlined above.[27] During the brief recovery period of February–June, 1933, man hour manufacturing employment increased 21 per cent, manufacturing physical output increased 39 per cent, hourly wages fell 4 per cent, average labor cost per unit of output fell 17 per cent, and average sales price of manufactured goods increased 5 per cent. The increase in output per labor hour, and the corresponding fall in labor cost per unit of output seem to have been only slightly due to technical improvements during this period.[28]

During the longer period February, 1933–March, 1936, also, increasing real labor costs seem not to have been encountered. During that period manufacturing man hour employment increased 43 per cent, average hourly wages 34 per cent, average labor cost per unit of output 22 per cent, average manufacturing selling price 25 per cent, manufacturing physical volume of production 58 per cent, and average price of raw producers' goods 61 per cent. Thus money labor costs did not rise as much as money wages, and greatly increased employment took place while money wages and material costs averaged together were rising more than prices.[29] Plant improvement was partly responsible for these developments, but even had plant remained the same, significantly increasing marginal costs would probably not have been experienced.[30]

Statistics thus seem to indicate that, even over a fairly long recovery period, increasing marginal costs were not experienced, and that employment increased in spite of a slight rise in real wage rates. The figures, of course, do not indicate whether the increase

[27] The figures in this paragraph and the next are from F. C. Mills, *op. cit.*, pp. 319, 336–337.

[28] According to a recent study made by the National Resources Committee, *Technological Trends and National Policy*, technological improvement was very rapid in 1931 and 1932, but in the manufacturing industries was not significant during the NRA period. See especially pp. 68–81.

[29] Wages here are estimated as 70 per cent of total manufacturing costs.

[30] See above, footnote 28.

in employment would have been more or less rapid had real wage rates been allowed to fall; neither do they indicate whether the recovery would have been more or less permanent.[31] Finally, they do not indicate how long reemployment could take place at stable real wages if nothing except wages above marginal product served to check that reemployment; the answer to this would depend partly upon the extent of market imperfection present, the gradualness or steepness of the rising cost curve when it did start to rise, and a number of other considerations. It is at least possible that, by the time plants have started producing at increasing marginal costs, sufficient technological improvement will have taken place, so that real wage rates can actually be higher than they were when plants were producing at decreasing or constant marginal costs. It is also possible that this technological advance might itself be a cause of unemployment.[32]

V

If a mere increase in the volume of monetary savings is not sufficient to increase the volume of investment, then the capital scarcity argument for lowering wages loses its validity. If imperfect competition and excess capacity are typical of the greater part of industry, then marginal productivity arguments for wage reductions lose their validity. There are, however, a number of wage reduction arguments which are not based upon any formal theory of wages or capital, and which might, for want of a better term, be called "pragmatic."

A good example of such a "pragmatic" theory is the one presented by Jacob Viner,[33] who expressly repudiates conclusions drawn from marginal productivity. Viner believes that money wage reductions are a practicable way of increasing employment because of their action in raising the margin of profit. According to him, Keynes misstates the argument for lowering wages; what

[31] J. M. Clark, for instance, thinks that a low wage policy might make recovery speedier, but also less lasting. See his views on the recent recession in the *Christian Science Monitor*, November 20, 1937, p. 1.

[32] See *Technological Trends and National Policy*. According to equilibrium theory, of course, if technological advance is followed by unemployment, not the advance, but some other condition, is the cause of the unemployment.

[33] Jacob Viner, *loc. cit.*

is wanted is not lower wages accompanied by lower prices, but lower wages accompanied by stable prices. If wages are cut and prices do not fall, then the margin of profit is widened, and business men are induced both to add to their scale of output and to make replacements and improvements which have been long delayed.

Viner's argument rests upon two assumptions: (1) that price stickiness will prevent prices from falling immediately after wages are cut; and (2) that business men will not hesitate long before increasing investment expenditures. The first assumption again illustrates Viner's departure from marginal productivity orthodoxy, which cannot recognize merit in the price stickiness which he sees as a great help. The second assumption illustrates the basis of the clash between Viner and such an anti-deflationist as Keynes; according to Keynes, the business man is made timid by depression and will hesitate so long before increasing investment that the wage cut will have time to bring about a decline in consumer purchases and thus to deepen further the depression. Once again the essential basis of disagreement between two leading economists is found in the tricky problem of expectations.

Slichter advances another leading "pragmatic" theory for wage reduction. He seems to agree with Viner in his conclusions, but the particular wage policy which he stresses is the reduction of wages in the producers' goods and especially in the construction, industries. Slichter bases his arguments upon the importance of construction and similar costs in helping business decide whether or not to make replacements and improvements.[34] Of all the arguments for wage reductions, this seems to be the one the most widely accepted. Not only is it advocated by economists like Slichter, who in general are favorable to wage cuts, but also by the advisers of the Roosevelt Administration,[35] who are opposed to most types of general wage slashes.[36]

One of the most important of the "pragmatic" arguments for

[34] See his review of J. M. Clark's *Economics of Planning Public Works* in *American Economic Review*, March, 1937.

[35] See, for instance, President Roosevelt's speech of January 3, 1938.

[36] G. F. Warren and F. A. Pearson, *Gold and Prices*, p. 390, however, object to lowering construction costs, claiming that such cost reduction lowers the value of real estate and results in bankruptcy and the weakening of the banking system.

wage reductions is sometimes presented as a part of the marginal productivity theory. This is the argument based upon the possibility of labor-capital equipment substitution. It is obvious, however, that while the labor-capital equipment substitution theory does not necessarily clash with arguments based upon marginal productivity, neither does its validity depend upon the realism of marginal analysis. Even if price is far above marginal cost, and "monopolistic exploitation of labor" is taking place, a union drive for higher wages may merely lead to the replacement of men by machines. Experience seems to have proved this conclusively.

As presented by Hicks,[37] the labor-capital equipment substitution theory is as follows:

An increase in wage rates may not at first cause unemployment; the entrepreneur pays the higher wage and employs as many as before. Some time is necessary before adjustments can be made. But after the passage of a short time period, the enterpreneur starts replacing men with machines, and continues to do so as long as the cost of the machines remains low relatively to the wage rate demanded by workers. Only a fall in wages relative to the price of machines, or a rise in the price of machines relative to labor, will make the entrepreneur reverse the process and take on new workers instead of repairing or replacing machines. This possibility of substitution accounts for a great part of the seemingly permanent unemployment now present in Europe, and only a change in labor-union policy will allow such unemployment to be reduced.

Hicks' conclusions are partly challenged by J. M. Clark,[38] who thinks that wage cuts intended to bring about replacement of machines by men may well be futile. In the short run, he thinks, technical considerations prevent any significant shift; and over a longer period of time wage cuts intended to prevent technological unemployment may help bring on oversaving and the more serious cyclical unemployment. Strengthening Clark's argument is the fact that since the World War technological advance has been so rapid that only very great wage cuts indeed could have caused a

[37] *The Theory of Wages*, pp. 184–203.

[38] *Strategic Factors in Business Cycles*, pp. 141–142.

reversal of the trend. There may well be a dilemma of the nature which Clark indicates.[39, 40]

VI

The arguments above are all concerned chiefly with the necessity for and the wisdom of money and real wage rate reductions. Some of them, however, if realistic, require important changes in the general body of wage theory.

Orthodox wage theory has always considered wage rates determinate: subsistence was followed by wages fund, wages fund by marginal productivity, and marginal productivity by mathematical equilibrium theory, all of which looked askance at any clamor for higher wages. Just after the war, the work of Alfred Marshall and W. C. Mitchell resulted in what might be called an "orthodox variant of orthodoxy":[41] wages were supposed to lag behind marginal productivity during the upswing and to be above the competitive figure during the downswing. The only element of indeterminacy, however, was that due to lagging monetary adjustments.

A few years later J. M. Clark came forward with the suggestion that wages are always below marginal productivity, both on the upswing and on the downswing. On the downswing, he remarked, capital has no true marginal product, and hence any return which it receives is taken from the marginal product of labor. Clark also suggested that, except during periods of full employment, "marginal productivity" is almost a meaningless term.[42]

[39] Economists who do not believe in the possibility of over-saving, but who do believe in the possibility of profit-inflation, can logically agree with Clark regarding the existence of such a dilemma.

[40] Perhaps there should be mentioned here two other wage reduction arguments: (1) J. M. Clark, *Strategic Factors in Business Cycles*, pp. 201–202 and Wilhelm Ropke, "Trends in German Business Cycle Theory", *Economic Journal*, September, 1935 think that wage cuts are frequently beneficial in the early stages of recession, but that they deepen the deflationary spiral when they are made in periods of advanced recession or deep depression. (2) F. C. Mills, *op. cit.*, argues that industrial prices and hence industrial wages, will have to fall relatively to agricultural prices before national prosperity can be achieved.

[41] Mitchell, of course, never considered himself a member of the orthodox school. His findings, however, were used to modify and bolster the orthodox marginal productivity theory.

[42] *The Economics of Overhead Costs*, pp. 469–470.

These criticisms have been followed by more drastic ones. The remarks of Viner, Chamberlin, and Robinson, cited above, form an almost complete denial of the validity of orthodox marginal productivity analysis. If plants operating at partial capacity usually operate at constant or decreasing marginal costs, or if industrial and commercial prices are typically administered, then equality of wages and marginal product can only be looked upon as the exception rather than the rule; and approximate equality of the two should be regarded as largely due to entrepreneurial policy and labor-union pressure.[43]

Perhaps wage theory in the future will take on more and more the form of discussions of cyclical wage policy. For such a dynamic theory of wages to be made complete, the possibilities of wage increases, even more than of wage reductions, should be considered.

[43] These remarks are, of course, not inconsistent with a belief that in the long run, when marginal productivity increases, wages usually increase also. The studies of Paul H. Douglas seem to prove this fact conclusively, as does general observation. But although marginal productivity and wages usually increase together, that does not mean that they coincide, or that a theory of pure competition can explain the similarity of the movements.

OLD-AGE INSURANCE AND THE SOUTH

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Insecurity in old age is one of the most threatening by-products of industrial progress. There is probably no economic risk that the average wage earner is less equipped to meet by his individual efforts. Employment opportunities decrease rapidly after about forty; the problem is further complicated by the fact that the length of life and the proportion of older people are increasing. While the older worker thus finds it difficult, and often impossible, to support himself out of current earnings, other factors beyond his control often prevent him from saving for old age during his earlier years. Low wages, disproportionately heavy family obligations, sickness and accident, unemployment, early forced retirement from regular work, and the loss of savings—all these aggravate the hazard of old-age insecurity.

The net result of all these forces is clearly evident in recent estimates of dependency among the aged. In 1935 at least half the 7½ million persons then over 65 were estimated to be dependent.[1] A later study[2] indicates that in 1937 only one out of every three persons in this age group was substantially self-supporting, either from savings or current earnings. One of the major purposes of the national Social Security Act, passed in 1935, is to provide some basic measure of protection against this risk. To this end, it establishes two distinct but interrelated programs: old-age assistance on a basis of need through a joint federal-state program, and old-age insurance on a contributory basis through a national program administered directly by the federal government.

Old-age assistance is administered by the states, the federal government matching state expenditures for this purpose, in states with approved plans, up to a combined monthly total of $30 to

[1] Report to the President of the Committee on Economic Security, p. 24.

[2] Marjorie Shearon, *Economic Insecurity in Old Age*, pp. 4–5.

each individual aided. All the states are now taking part in this program and by September, 1938, were thus aiding more than 1,720,000 needy old people. Old-age insurance, the only part of the Social Security Act to be directly administered by the federal government, went into effect January 1, 1937; by September, 1938, more than 41,000,000 applications for accounts under this system had been received from wage earners. This program will provide monthly annuities to retired workers. These monthly payments, which will begin in 1942, will be made to workers who attain age 65 and retire, provided that prior to reaching 65 they shall have fulfilled certain minimum requirements. These requirements are chiefly: employment in "covered" occupations (in general, all industrial and commercial occupations) for at least one day in each of at least five years; and earnings of at least $2,000 from such employment. A subsidiary feature provides for the payment of lump-sum benefits to covered wage earners who at 65 do not meet all the requirements for an annuity, and to the estates of those who die before receiving the minimum amount due them.

The effects of federal-state old-age assistance programs in the South, particularly as regards its financing, were discussed by Clarence Heer in his article, "Financing the Social Security Program in the South," in the January, 1938, issue of *The Southern Economic Journal*. Professor Heer offers certain criticisms of the basis, prescribed in the existing law, for making federal old-age assistance grants to the states. However, a consideration of the total problem of old-age security—either with respect to the country as a whole, or to a particular section—must also include an appraisal of the old-age insurance provisions of the act. A review of this complementary and at least equally important program, hence, is presented here.

Whatever special significance compulsory old-age insurance has for the South is related not only to the general problem of economic insecurity for the aged, but also to those factors which distinguish the economy of the South from that of other sections. For the purposes of this discussion, the South is defined as the 11 states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. Among the factors which will determine the special significance of

old-age insurance in this section are: (a) the relative level of wages, (b) of the age distribution of the population, (c) the extent of coverage, (d) the degree of security provided, and (e) the relation of the developing old-age insurance program to the existing old-age assistance program.

I

A principal factor in determining the individual's ability to provide against dependence in old age is his income in the productive period of life. In the South, annual average incomes are

TABLE I

Average Taxable Wages Per Employee in 1937 as Shown by Preliminary Tabulation from Old-Age Insurance Records

SOUTHERN STATES	TOTAL	WHITE	NEGRO	NORTHERN AND WESTERN STATES	TOTAL	WHITE	NEGRO
Total for the 11 States	$572	$675	$289	Total for the 11 states	$927	$949	$540
Alabama	609	712	389	Colorado	742	750	501
Arkansas	488	551	288	Illinois	1022	1051	620
Florida	503	624	239	Maryland	828	906	460
Georgia	546	654	231	Massachusetts	924	931	585
Kentucky	672	715	393	Minnesota	836	841	554
Louisiana	618	761	310	Missouri	831	858	485
Mississippi	391	515	225	Montana	857	863	500
North Carolina	568	661	273	New Jersey	984	1013	538
South Carolina	501	627	213	Rhode Island	862	867	522
Tennessee	597	674	313	South Dakota	615	618	387
Virginia	657	765	335	Washington	866	872	511

low in comparison with those of other sections. This is clearly brought out by a preliminary tabulation, prepared by the Bureau of Old-Age Insurance of the Social Security Board, which shows by states the taxable wages paid in 1937 to employees covered by the insurance system.[3] Table I gives the average earnings as they appear in this tabulation for the eleven Southern states previously

[3] This tabulation includes only non-migrant employees, who were identified as employed during some part of both the first and the second reporting periods of 1937 in the state where their account numbers were assigned. Such employees represent approximately 90 per cent of the total working during the year. Annual wages in excess of $3,000 from any one employer are not counted under the provisions of titles II and VIII of the Social Security Act.

mentioned, and also, for comparison, those for eleven states in other sections of the country.

The highest state average in the South—$672—is $350 less than the highest in the group of eleven northern and western states, while the lowest average in the South is $224 less than the lowest in the North and West. The maximum state average in the South only slightly exceeds the minimum in the eleven northern and western states, while the average of the former combined is more than $350 per year below the general average of the latter. The lower averages in the South are not entirely explained by the inclusion of wages for Negro workers; for the average earnings of white wage earners in the South are also much below those of the same race in the group of northern and western states. Moreover, annual wages in excess of $3,000 from any one employer are not counted under the old-age insurance program. Were these higher earnings included, the comparison would almost certainly be still more favorable to the most heavily industrialized states.

Similar low wage levels in the South are observed in studies of specific categories of wage income.[4] Farm workers in the South are paid about one-half as much as those in the remainder of the country.[5] The available data indicate that levels for unskilled labor are, at a maximum, only slightly higher than half of wage levels for similar work in the North.[6] Wage rates for industrial workers in Southern states in general average approximately two-thirds of those paid in other sections of the country. N. A. Tolles in the *Monthly Labor Review* for January, 1938, indicates that in July, 1937, textile workers in the North had a 28 per cent income advantage over Southern workers in the same industry. A few categories such as foundry and machine shop workers and those in railroad repair shops receive in the South as high as 80 and 90 per cent, respectively, of wage rates paid in the North. Though the degree of comparative disadvantage thus varies, it is evident

[4] See, e.g., H. M. Douty, "Recovery and the Southern Wage Differential", *The Southern Economic Journal*, January, 1938.

[5] Clarence Heer, *Income and Wages in the South*, p. 14, and Table IV.

[6] *Ibid*, pp. 42–43, and Table XI. Statistical data relative to the earnings in 1937 of individual employees in employment covered by title II of the Social Security Act from the old-age insurance records will provide a more comprehensive and definite comparison of employee earnings in the South and other sections than any data previously available.

that for the vast majority of wage earners Southern levels are below—in some categories substantially—the level of wages paid elsewhere.[7]

Differences in income between industrial workers of the North and South are also indicated by statistics on the lump-sum old-age insurance payments certified by the Bureau of Old-Age Insurance during the fiscal year 1937–38. The amount of each lump-sum payment is equal to 3½ per cent of the worker's total wages in covered employment since December 31, 1936. Inasmuch as the payments now being made are based upon wages received over a short period of time, they are naturally small. However, the relative size of payments reflects the relative wage income and amount of employment of covered workers. For the 15 northern states, east of the Mississippi River, the average old-age benefit payment for the year from June 30, 1937, to July 1, 1938, was $36.87. The average for the South in the same period was $26.22. On this basis of comparison the average income of northern workers in industrial and commercial employment covered by the Social Security Act appears to be about 40 per cent greater than that of similar workers in the South.

Relative costs of living must be considered as well as the level of money wages. It is frequently claimed that the differential between the economic status of workers in the South and in the North is, because of lower living costs, much narrower than a simple comparison of wage and income levels would indicate. This assumption is challenged by several studies.[8] One study on the relative cost of food states that ". . . with the exception of meat, the cost of food items in the South and the cost of the same items in the North is practically the same."[9] This, of course, does not take cognizance of other necessities such as shelter, clothing, and health maintenance. A survey published by the American Federation of Labor maintains that there is very little difference in the cost of living between Northern and Southern cities.[10] The differ-

[7] *Ibid*, p. 30, and Table VI.

[8] See especially H. M. Douty, "Are Living Costs Lower in the South?", *The Southern Economic Journal*, January, 1939, for a rather exhaustive review of the literature on this subject.

[9] Berglund, Starnes and de Vyver, *Labor in the Industrial South*, p. 127.

[10] Research Division, American Federation of Labor, *Cost of Living in the South*.

ence, it is claimed, is in the lower *standard* of living throughout the South, and this in turn is ascribed to the lower income received by its workers. The results of such a survey, however, would depend upon both the cities chosen for study, and upon the territory included in defining "the South."

There is evidence that regardless of locality many American wage earners are handicapped by low wages in attempting to provide their own old-age security. But the facts just cited indicate that for most workers in the South these handicaps are even greater than they are elsewhere. It is, therefore, more difficult for them to accumulate reserves by steady saving during these productive years, and their chances of maintaining self-dependence in later life through their individual efforts are correspondingly low.

II

Individual inability to provide for old age compels society within the area to assume the burden of old-age dependency and to provide for the needy aged from public sources. Such community provisions will be determined by (a) the extent of the burden, and (b) the available public resources. The extent of this burden is determined by the number and proportion of aged persons as well as by their degree of dependency—whether total or partial. At present both the absolute number and the proportion of the aged in the total population of the United States is increasing with considerable rapidity. This means that the productive proportion of the population is growing smaller while the retired and nonproducing proportion is growing larger.

Of 123 million people in the United States in 1930, 6.6 million or 5.4 per cent were aged 65 or over. By 1960 it is estimated that the actual number in this age group will have reached 13.8 million and will thus have more than doubled; this age group, it is estimated, will then represent 9.6 per cent of the total population or nearly twice its present proportion.[11] The South, however, has a smaller proportion of aged than the country as a whole. In 1930 persons 65 years and over comprised 4.1 per cent of the population in that section, as compared with 5.4 per cent for the total United States. It is estimated that by 1960 the aged will be but 6.5 per

[11] W. S. Thompson and P. K. Whelpton, *Estimates of Future Population by States*.

cent of the population in the South as compared with 9.6 per cent for the entire United States. This smaller proportion of aged in the South tends to reduce the relative burden of old-age dependency on its economy as compared with other sections.

In considering the resources available to the South for providing old-age security, it appears that there the cost of caring for the dependent aged is relatively more difficult to meet than in other sections. Clarence Heer states in his article that: "Because of the low average level of income in the South, the predominance of agriculture, and the threat of interstate tax competition, the Southern states in particular have not been able to raise much revenue from the so-called ability taxes and have been forced to adjust their taxes to reach down to the little man. . . . To the extent that the social security program of the South is being financed through increased taxation, it is evident that a large part of the relief revenue is being raised through taxes which bear regressively upon the poor."[12]

Available evidence indicates that provision for those who are now old and in need is relatively less adequate in the South than in the country as a whole. The average payment to recipients of old-age assistance for August, 1938, was $9.76 in the South as compared with a national average of $19.71. Of the Southern states, Florida provides the highest average monthly payment, $14.21; while Mississippi pays the lowest, $5.65. Though taxing procedures, standards of adequacy, and other factors affect the level of assistance, there is no question that a major problem, particularly in the South, is that of the state's financial capacity.

III

In parts of the country where difficulty has already been encountered in financing old-age assistance on the basis of federal, state, and local contributions from general tax funds, the implications of old-age insurance are particularly important; for it is the purpose of this program to forestall in so far as possible the need for old-age assistance to those who lack resources, by providing an income to which the beneficiary is entitled as a right based on his own past employment. The effectiveness of old-age insurance

[12] This journal, January, 1938, p. 299.

will be determined, first, by the extent to which it will have covered the potential area of future old-age dependency, and, second, by the relative adequacy of its provisions.

The relationship between an old-age insurance system and the potential area of future old-age dependency is determined by the number and proportion of young and middle-aged workers not included in the program. Of the estimated 27.7 million total population of the 11 Southern states (as of July 1, 1937) 5.9 million had registered for old-age insurance accounts by June, 1938. Taking the 1930 census figures[13] as a rough basis of comparison, this represents about 64 per cent of the total gainful workers in these states. Another significant comparison shows that 21.3 per cent of the total population in these 11 states had registered with the Bureau of Old-Age Insurance by June, 1938, as compared with 30.6 per cent of the total in the remaining 37 states. This smaller proportion of covered workers in the South is due to the fact that the present old-age insurance provisions do not cover agricultural workers, domestic servants, the self-employed, and some other groups prominently represented in the South's gainfully employed population.

Another aspect of this same situation is the relatively low coverage of Negro wage earners—again due to the fact that a large share of Negro workers are engaged in either agriculture or domestic work. If the old-age insurance provisions had been in effect in 1930, they would have covered nearly 80 per cent of foreign-born white, more than 74 per cent of native white, and only 48.4 per cent of Negro salary and wage earners.[14]

Due allowance must be made for these differentials in any attempt to evaluate the old-age protection which this program offers Southern workers. It must also be recognized that in the South, as throughout the country, some persons have applied for account numbers who are employed only intermittently in covered occupations, or who are not now so employed but hope to be. It

[13] 9.3 million "gainful workers" in 11 states. The 1930 census includes within the number of "gainful workers" not only wage earners but also persons who are not unemployed, children, housewives, or persons living exclusively on pensions or private or public charity. Although obviously inadequate for our purposes, these figures may be useful in obtaining some basis for comparing the gross coverage of the federal insurance program.

[14] W. S. Woytinsky, *Labor in the United States*, p. 36.

is also obvious that in all localities some covered workers will lack sufficient wage credits to qualify for a monthly annuity and will receive instead a single lump-sum payment at age 65. Yet, even considering these limiting factors there is adequate reason to believe that a substantial portion of Southern wage earners will qualify for earned monthly annuities when they reach 65 and retire. This will go far toward reducing the present two-out-of-three ratio of old-age dependency; and this in turn will help to reduce the cost of old-age assistance which the South now finds so burdensome.

Viewed from certain other angles, the South is in a relatively favorable position as regards the old-age protection afforded by this program. For example, younger workers have more opportunity to build up old-age insurance protection because of their potentially longer period of wage earning before retirement age. The age distribution of applicants for account numbers in the South indicates a preponderance of younger workers in covered employments. Of the 5.8 million applications, upon which data is now available, 2.2 million or 38 per cent represent persons in the age group 20 to 29. Three million or 52 per cent are in the age group 20 to 34, and 2.6 million or 45 per cent in the age group 15 to 29. For the United States as a whole these percentages are 34.6, 47.4, and 41.1 respectively.

The fact that the formula for determining the amount of monthly old-age insurance payments is heavily weighted in favor of workers with lower earnings must also be taken into consideration. In view of the data already cited on wage levels, this provision takes on added significance in the South. According to the terms of the act, the annuities to be paid qualified wage earners are to be computed as follows: Each monthly payment will equal ½ of 1 per cent of the first $3,000 of total wages earned in covered employment prior to age 65, plus 1/12 of 1 per cent of the next $42,000, plus 1/24 of 1 per cent of any amount over $45,000. The maximum monthly benefit is $85, the minimum $10. By this method of computation, the low wage earner receives the largest relative benefit. This is indicated by the attached table of computed benefits (Table II). The first column of figures is taken from the wage averages in five different industrial classifications as given in

Professor Heer's monograph, *Income and Wages in the South*, p. 30. All figures assume a regular and continuous employment over the period of years indicated at an unchanging wage level.

It will be noted that in the group with the lowest average wage, the knit goods industries, the monthly benefit after five years of regular employment will be 28 per cent of the monthly wage; after ten years, about 33 per cent; and after twenty years, about 43 per cent. However, the average wage earner in the railroad repair

TABLE II

Potential Monthly Benefits*

	Average Wages		After 5 Years		After 10 Years		After 20 Years	
	Yearly	Monthly	Total wages	Monthly benefits	Total wages	Monthly benefits	Total wages	Monthly benefits
South:								
Knit Goods	$665	$54.58	$3,275	$15.26	$6,550	$17.96	$13,100	$23.42
Cotton Goods	671	55.92	3,355	15.30	6,710	18.09	13,420	23.68
Lumber and Timber	748	62.33	3,740	15.62	7,480	18.73	14,960	24.97
Foundry and Machine Shops	1,230	102.50	6,150	17.63	12,300	22.75	24,600	33.00
Railroad Repair Shops	1,376	114.66	6,880	18.23	13,760	23.98	27,520	35.43
North:								
Knit Goods	$1,099	$91.58	$5,495	$17.08	$10,990	$21.66	$21,980	$30.82
Cotton Goods	1,012	84.33	5,060	16.72	10,120	20.93	20,240	29.36
Lumber and Timber	1,195	99.58	5,975	17.48	11,950	22.45	23,900	32.42
Foundry and Machine Shops	1,495	124.58	7,475	18.73	14,950	24.95	29,900	37.42
Railroad Repair Shops	1,537	128.09	7,685	18.90	15,370	25.61	30,740	38.12

* Based upon average yearly wages estimated in: Heer, *Income and Wages in the South*, p. 30.

shops will accumulate only enough wage credits after five years of covered employment to pay a monthly benefit of about 15 per cent of his regular monthly wages; after twenty years of regular employment his benefit would come to about 30 per cent of wages.

This formula of weighting benefits in favor of the low wage earners creates a differential favorable to the South as against other sections of the country. For example, the knit goods worker in the North, receiving an average wage twice as high as that of the knit goods worker in the South, would accumulate after five years of steady employment a monthly benefit equal to 18 per cent of his

regular monthly wage, as compared with the 27 per cent of monthly wage received by the knit goods worker in the South. The railroad repair shop worker—the highest average pay classification—would receive after five years in the North a monthly benefit equal to 14 per cent of his monthly wage, as compared with 15 per cent in the South after a similar period. In the North after twenty years he would receive 22 per cent of his monthly wage as compared with the slightly more than 30 per cent of wages in the South for the same work over a like period of time.

IV

Clearly the intent of the Social Security Act is to provide against old-age dependency by the two complementary programs—noncontributory assistance to the needy aged of both the present and future, and compulsory contributory annuities to retired wage earners of the future. The mutual interrelationship of these two programs must be examined in any attempt to evaluate either the degree of security they provide to the individual or the fiscal burden upon the state and federal governments.

This relationship has been subjected to considerable criticism. It has been pointed out as an anomaly that a system of gratuitous assistance payments which, so far as the federal law goes, *may be* as much as $30 to an individual or $60 to a married couple, should be established side by side with a system of earned annuities, many of which would be lower than the potential assistance maximum. It has been charged that this does injustice to the hard-working and tax-paying wage earner; and it is sometimes assumed that the level of old-age assistance is entirely out of proportion to the benefits which the steadily employed wage earner might provide for himself under the contributory federal old-age insurance program.

If this criticism turns out to have any validity at all, it certainly would have none as far as the Southern states are concerned. This is apparent from a comparison of existing levels of assistance payments in Southern states and conservative estimates of future insurance annuities. Reference to the table of potential benefits in the five industrial categories which have been studied shows that a worker in the lowest average wage category, after but five years of steady work or its equivalent spread over a longer period,

will be eligible for a monthly insurance benefit approximately equal to the highest average old-age assistance paid in the South. This annuity would also be higher than the average assistance payment now being made in all Southern states except Florida, which pays $14.21, and Tennessee which pays $13.24; it compares more than favorably with the average of $5.65 paid in Mississippi. Further, the minimum monthly insurance annuity of $10, available to wage earners who have received a total of but $2,000 in wages prior to their attainment of age 65, is above the $9.76 average old-age assistance payment for the entire South.[15]

The present burden of old-age dependency has been viewed as a semi-temporary one. As the system of federal old-age insurance begins to pay earned monthly benefits, it is contemplated that the total cost of old-age assistance will tend to decrease. This will help to relieve the financial burden of the states, since each state with its local subdivisions pays approximately half the cost of this program. For example, in the 11 Southern states 194,433 wage earners, who in 1937 were between 55 and 59, have filed applications for account numbers. Payment of monthly benefits will begin on January 1, 1942, and this group will attain age 65 during the first 6 years after that date. Even assuming that for one reason or another only 50 per cent of these registered wage earners become eligible for monthly benefits and assuming that they receive no more than the minimum benefit of $10 per month, it will mean that in 1942–1948, inclusive, 97,216 aged persons in the South will start receiving $972,160 per month in the form of old-age annuities. The obligation of the 10 Southern states for old-age assistance during August, 1938 (federal-state public assistance did not go into effect in Virginia until September, 1938) totalled $2,500,797; this amount represented assistance allowances averaging $9.76 to some 256,225 recipients. Even during the first 6 years in which old-age annuities become payable, it thus appears that the federal old-age insurance system will shoulder a sizeable proportion of the burden of old-age dependency and will finance in increasing proportion of the cost of old-age security.

This consideration is especially important in the states paying low assistance allowances. In Mississippi, for example, where the average monthly old-age assistance payment is now $5.65, the

[15] Old-age assistance payment figures are for the month of August, 1938.

minimum insurance annuity of $10 will be of great importance both to aged beneficiaries themselves and to the economy of the states. Mississippi now has on its old-age assistance rolls approximately 16,500 recipients, and its total assistance payments from federal and state funds comes to about $93,000 per month. There are also in the state nearly 9,000 wage earners between the ages of 55 and 59 who are registered for old-age insurance. If during the first 6 years in which annuities become payable, not more than one-half of the registered persons become eligible for the minimum benefit of $10, it will mean that 4,496 aged persons will begin to receive $44,960 per month. Of course, in so far as annuitants are able to build up wage credits in excess of the minimum of $2,000, the amount of the annuities will be higher.

Old-age insurance benefits—paid as a right based on past employment regardless of need—may go to some few persons who would have enough other resources to maintain their independence after retirement without this additional income. In many more cases the annuity will supplement other resources so that an individual who would otherwise need public assistance can remain self-supporting. Even if the annuity alone is not enough and public assistance must still be given, the amount of aid needed will be reduced. It is recognized, of course, that old-age insurance does not cover the entire population. Old people will continue to become dependent, though in much smaller numbers. These dependent persons will in the main be those who have never been wage earners or have been employed in excluded occupations, or have not had sufficient employment to qualify for a monthly annuity. In the course of time an increasing proportion of the aged will become federal insurance annuitants. This will achieve the double purpose of reducing the burden upon the states and enabling them to provide a more equitable standard of assistance to that portion of the population which continues to be dependent upon public support. Though payments under both old-age insurance and old-age assistance do not appear to be very large, their net economic effect cannot well be judged from a mere study of individual amounts. This effect can only be estimated by a consideration of the economic pattern of the particular community—in this case, the South.

Whatever the causes of depression, one of its most important

manifestations has been the drying up of purchasing power. This has been a factor of all the severe American depressions in the past. While social security payments should not be regarded as a cure-all for depressions, they will tend to smooth out over long periods of time the purchasing power of the lower income groups. The taxes required to sustain both the old-age insurance and the old-age assistance programs have already been described. But it must be pointed out that the money paid to individuals does not come entirely from contributions, in the case of old-age insurance, which they have previously made, or from taxes, in the case of old-age assistance, made in the locality where they are living. The payroll taxes utilized in connection with the old-age insurance program are increased by interest payments made by the federal government. State public assistance is financed on a matching basis, federal grants contributing approximately half of the state's total expenditures. Taking the country as a whole, the cost of old-age protection and the added purchasing power made available to the aged probably strike a rough balance. In a particular locality the receipts from these programs may well exceed their cost, thus increasing local purchasing power. This situation applies with particular force to the South, since the old-age insurance program pays relatively larger benefits to low income groups than it does to those of higher income levels. The provision of these benefits through taxation tends to stabilize and extend purchasing power over time, by taxing incomes where taxable incomes exist and by making payments where little or no income exists.

It may be objected that old-age insurance and old-age assistance payments are too small to prove of much value. From the point of view of economic theory, however, the absolute size of the payment is less important than its position in the general income pattern. Payments such as these will constitute marginal increments, small in themselves, but, being marginal, of critical importance to the general economic structure. They may well spell the difference between economic stagnation and economic activity.[16]

[16] The total income of the people of the United States in 1937 has been estimated by Robert Nathan in the *Survey of Current Business* for June, 1938, p. 1, as approximately seventy billions of dollars. A federal "spending program" of three and one-half billions of dollars constitutes but 5 per cent of this total. Yet this increment is sufficient to accelerate the movement of economic life.

Sectionalism, with its attendant regional dependence on certain forms of production, is another factor making for economic instability. The South is peculiarly dependent in many localities upon single crops or single industries. Since old-age assistance and insurance benefits are derived from taxes spread over the entire American industrial pattern, they tend to offset the economic sectionalism of the South and its dependency upon certain types of agriculture and industry.

Economists have only begun to realize the full significance of the manner in which national income is distributed. In recent years many students have pointed out that where large shares of the national income go to the higher income groups, they tend to result in proportionately large investments in capital goods; and that this tends to create cycles of overproduction. A larger share spread out among the lower income groups would cause more money to be spent for consumer's goods and achieve better economic balance. The operation of the old-age assistance and old-age insurance programs tends to promote this kind of stability. Moreover, these programs are parts of a nation-wide effort to promote security on a broad front. Taken alone, old-age insurance and old-age assistance may represent only a relatively small segment of protection. Considered as parts of the larger program, which the federal government has begun to develop in the past few years, their operation makes a substantial contribution to the cumulative total.

Another segment in this program is the movement toward control of wages and hours of employment, as provided in the recent Fair Labor Standards Act. This will probably raise the income of thousands of Southern wage earners and so increase their old-age protection. A third factor is the gradual unionization of Southern workers. If the growth of unions in the Southern states achieves any permanent results, it will also have the long-range effect of increasing old-age insurance annuities by raising wage rates. This effect will be reinforced if labor organization operates to stabilize employment in Southern industries. With the movement of industry into the South, the passage of minimum wage legislation, and the expansion of labor unions, rising wage scales for Southern workers would seem fairly well assured. Upon this rising level

is dependent not only old-age security but also the general and permanent economic security of the mass of the Southern people.

These anticipated wage increases will be gradual and will require some years to reach the levels of wages paid elsewhere. Such increases will probably help to produce an upward trend in living costs in the South. Thus, when the present low wage earner in Southern industry, particularly the worker of middle age or above, becomes eligible for a federal old-age annuity, he will find the size of his annuity based largely on low-level wages. He may then be faced with the problem of stretching his annuity to cover a living cost based upon higher wage levels than that anticipated. This is but one of many problems still to be solved in making old-age security an economic reality for the people of the South and of the nation. But in spite of these problems great gains have already been made. With the cooperation of the federal government, the Southern states have at least been able to give more adequate assistance to those who are now old and in need than they could make available in the past. In the meantime, old-age insurance is helping in the South as elsewhere to build up a substantial backlog of protection which over the years will increase individual security, maintain a minimum level of purchasing power, and reduce the public burden.

Moreover, any attempt to evaluate the effect of such a program as this must take a long-range view. For example, in projecting future development of federal old-age insurance, one may anticipate a steady increase for some time in the total number of covered wage earners. An average of approximately 500,000 new applications for accounts are now received by the Social Security Board each month. This normal increase comes from employment turnover and from workers moving from excluded categories of employment into included categories. But in addition it is anticipated that groups not yet covered, including both farm and domestic workers and the self-employed, eventually will be brought into the program by amendments to the present Social Security Act.

Present economic trends in the South point to higher wage levels and increasing industrialization. At the same time there is every reason to believe that old-age insurance will be expanded to

include the majority of nonindustrial wage earners as rapidly as experience in administering the present program warrants. Viewing these developments, the South may reasonably expect that an equitable and adequate system of protection against old-age dependency and related risks can and will be developed. That protection will benefit not only its individual workers and their families but the entire Southern community.

INEQUALITIES IN FARM ASSESSMENTS IN SOUTH CAROLINA

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All property in South Carolina was reported for taxes in 1936 at an assessed value of $360,000,336.00. This figure compares with a total of $415,390,125.00 in 1932 and $425,543,764.00 in 1928, and is only three-fourths as much as the total reported in 1921. It is the lowest at which property in this state has been assessed since 1917.

A detailed analysis of the properties which go to make up these totals is not possible at this time. The Comptroller General's Report for the year 1936 indicates a division of about 47 per cent personal property and 53 per cent real property, but since much corporation property is customarily returned as "personal" these figures mean very little. Further examination reveals that, of the total, 28 per cent is "real estate in the county," 20 per cent is real estate in cities and towns, and 5 per cent is real estate owned by corporations.

Not all of the "real estate in the county" is farm real estate. On the other hand, some of the real estate owned by corporations and in cities and towns is undoubtedly farm real estate, so that it is correct to say that farm real estate represents approximately one-fourth the total assessed value of all property and one-half the assessed value of all real estate in South Carolina.

The correct and uniform assessment of farm real estate is, therefore, of utmost importance to the farmers of South Carolina and, indirectly, to all the people. If, for example, a considerable degree of inequality is observed in the assessment of farm properties, it is reasonable to suppose that other properties—both tangible and intangible, both real and personal—are poorly assessed. It was for the purpose of ascertaining the facts with reference to farm real estate that there has been included in the program of the

Department of Agricultural Economics and Rural Sociology a study of farm taxation as one of the public service activities of Clemson College.

I

Through the cooperation of lending agencies in the state information was obtained on 1544 farms that had been appraised during 1935 and 1936 including acreage, owner's estimate of value, appraised value, and net return on the operation of the farm.

In each case there was obtained from records in the county courthouses information as to assessed value and taxes paid on the corresponding properties.

For purposes of this study, inequality of assessement is measured by variations in the ratio of assessed value on the tax books to certain other measures of value, particularly appraised normal market value and value assigned by owners.[1] In all cases the weighted average ratio for any group provides the basis for comparison. If the comparable ratio is less than this average, the property or group of properties is said to be underassessed; if it is more, the assessment is relatively too high. It should always be borne in mind that "inequality" is a relative term and any assessment which, comparatively speaking, is too low must, of necessity, be offset by another which, comparatively speaking, is too high.

In this study a large number of groupings has been made in an effort not only to reveal existing inequalities, but also to offer an explanation of how they came about and how they may be corrected.

The first of such groupings was by type of farming areas of which agricultural economists recognize nine in South Carolina. (See Figure 1). These areas differ not only in their physical and climatic features but also in size and value of farms, intensity of cultivation and returns per acre.

The average ratio of assessed value to appraised value on all

[1] "Normal market value" is that price at which, with reasonable effort, under normal conditions a property may be expected to exchange hands from a willing, but not forced seller, to a desirous, informed, but not anxious purchaser. Value assigned by owners is that which an owner gives as his estimate at the time he applies for a loan.

farms was 24.6 per cent. In other words, for every $100 of value recognized by appraisers, the assessors put down $24.60. This figure is about average for farm real estate over the entire state and is the chief reason for the high tax rate which prevails. By areas, the ratio varied from 16.0 per cent in Area IX to 29.2 per cent in Area IV.

Owners, appraisers, and tax assessors were all agreed that the farms in Area IX had a higher average value than those in any

FIG. 1. The 1544 farm properties included in this study were well distributed over the state by counties and by type-of-farming areas.

other area. They were also in agreement in designating second place to the farms in Area VI, third place to those in Area IV, and fourth place to those in Area VII. They were in substantial accord as to the relative position of farms in each of the other areas. Owners and appraisers, however, assigned to the farms in Area IX a value approximately three times the average of all farms while these same farms were returned for taxes at a figure which was only 1.8 times that for the group. Again, owners and appraisers considered the farms in Area IV to be about on a par

with the average but the farms in this area were assessed for taxes at a figure which was nearly 20 per cent *above* the average. (See Table II).

TABLE I

Ratio of Assessed to Appraised Normal Market Value of 1544 Farms in South Carolina by Type-of-Farming Areas, 1935 and 1936

TYPE-OF-FARMING AREA	NUMBER OF FARMS	TOTAL APPRAISED VALUE[a]	TOTAL ASSESSED VALUE	RATIO
I	458	$1,529,170	$350,039	22.9
II	336	1,096,330	283,945	25.9
III	154	443,620	91,159	20.5
IV	154	527,360	153,810	29.2
V	113	364,450	102,172	28.0
VI	71	272,400	72,210	26.5
VII	190	635,200	174,188	27.4
VIII	39	110,425	22,457	20.3
IX	29	286,300	45,825	16.0
All areas......	1,544	$5,265,255	$1,295,805	24.6

[a] Normal market value.

TABLE II

The Estimated, Appraised, and Assessed Value of 1544 Real Properties in South Carolina by Type-of-Farming Areas, 1935 and 1936

TYPE-OF-FARMING AREA	ESTIMATED VALUE[a]		APPRAISED VALUE[b]		ASSESSED VALUE[c]	
	Per farm	Rank	Per farm	Rank	Per farm	Rank
I	$6,734	6	$3,339	5	$764	7
II	6,758	5	3,263	6	845	6
III	5,862	9	2,881	8	592	8
IV	7,214	3	3,424	3	999	3
V	5,974	8	3,225	7	904	5
VI	8,672	2	3,837	2	1,017	2
VII	6,960	4	3,343	4	917	4
VIII	6,379	7	2,832	9	576	9
IX	20,809	1	9,872	1	1,580	1
All areas.....	$7,017		$3,410		$839	

[a] By farmers.
[b] Normal market value.
[c] On tax books.

The fact that owners and appraisers agreed with assessors as to the *relative position* of farms in each area but differed on the question

of *margins* between areas lends support to the idea that assessors are unable to make sufficient differentiation between properties of low and high value. In order to test this theory further all of the farms were placed in groups according to the total value of each.

When grouped in this manner it was found that 153 farms were appraised for $1,000 or less; 510 for between $1,000 and $1,999; 334 for between $2,000 and $2,999; and 159 for between $3,000 and $3,999. These four groups represent 1156 properties or nearly 75 per cent of the total included in this study. The remaining 388 were well distributed among the other value groups so that the

TABLE III

RATIO OF ASSESSED VALUE TO NORMAL MARKET VALUE OF FARM REAL ESTATE ON 1544 FARMS IN SOUTH CAROLINA BY VALUE GROUPS, 1935 AND 1936

NORMAL MARKET VALUE	NUMBER OF FARMS	APPRAISED VALUE[a]		ASSESSED VALUE[b]		RATIO
		Total	Per farm	Total	Per farm	
Under $1,000	153	$115,885	$757	$36,268	$237	31.3
$1,000- 1,999	510	718,365	1,409	206,417	405	28.7
2,000- 2,999	334	775,120	2,321	209,667	628	27.0
3,000- 3,999	159	524,275	3,297	130,221	819	24.8
4,000- 4,999	105	451,070	4,296	113,837	1,084	25.2
5,000- 7,499	151	884,150	5,855	222,929	1,476	25.2
7,500- 9,999	53	438,730	8,278	105,047	1,982	23.9
10,000-14,999	38	441,510	11,619	99,490	2,618	22.5
15,000 and above	41	916,150	22,345	171,929	4,193	18.8
All groups......	1,544	$5,265,255	$3,410	$1,295,805	$839	24.6

[a] Normal market value.
[b] On tax books.

analyses should reflect the situation as it is found on farms of corresponding value wherever located. All groups below $7,500 were assessed at a higher-than-average figure and all above $7,500 at a lower-than-average.

Assessed value was 31.3 per cent of appraised value in the low-value group and 18.8 per cent in the high-value group with the other groups arranged regularly in between these extremes. A uniform downward trend is observed for each of the years, 1935 and 1936, and for all areas.

The difficulty seems to be that assessors do not realize that an

increase of $1,000 in the assessed value of a property returned for $5,000 is no more than an increase of $100 in the case of a property returned at $500—assuming, of course, equality in the original returns. Furthermore, in view of the extremely low average assessed value per property returned for taxation in South Carolina, a return of $500 worth of taxable property is more likely to be adequate than is a return of $5,000. Few taxpayers gain any great satisfaction in making a return which is above the average in a particular locality.

While the appraisers placed 153 farms in the group of those valued at less than $1,000, owners themselves listed only 17 farms as coming within this range. These 17 farms were assessed for taxes at a value which was 29.4 per cent of that estimated by owners. This figure compares with 17.8 per cent in the case of 145 farms which owners valued at between $1,000 and $1,999 and with 10.4 per cent in the case of 133 farms valued by their owners at $15,000 or more.

II

Value per acre provides an excellent basis for studying inequalities in the assessment of farm real estate. According to appraisers only 53 properties included in this study had an average value of less than $10 per acre. The aggregate value of these farms was $115,620, or $7.58 per acre. They were assessed for taxes for $60,282 or $3.95 per acre, which was more than one-half of their appraised value. Eighty farms were appraised at a normal market value of between $50.00 and $59.99 per acre with an average of $53.26. They were assessed for taxation at an average of $10.45 per acre, or less than one-fifth of this figure. (See Figure 2).

When all farms are grouped by sizes there do not appear to be any marked inequalities in the assessment of the different groups. When, however, the separate size groups are further analyzed some significant variations may be observed.

Farms of less than 25 acres, for example, were assessed at nearly one-fourth of their value when appraised for less than $1,000 but only slightly more than one-tenth when appraised for between $3,000 and $3,999. The value of 50–99.99 acre farms when more than $5,000 was discounted for tax purposes by approximately 90

per cent but when between a $3,000–$3,999 the discount was 76.9 per cent, and when less than $1,000 only 63.5 per cent. On the average a 500-acre farm with an appraised value of $5,000–$7,499 looks like a $2,000–$3,000 property to the tax assessor, but a farm of the same size with an appraised value three times as much will receive an assessment less than twice as much.

Farms appraised for between $1,000 and $1,999 were taxed on the basis of an assessment which averaged 17.7 per cent of their

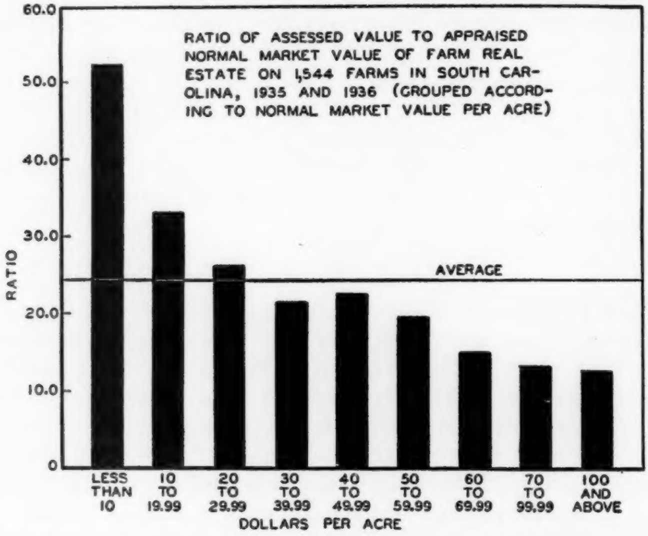

FIG. 2. Farms having a low average value per acre are assessed three or four times more heavily than farms having a high average value per acre.

appraised value when containing 25 acres or less; 24.1 per cent when, between 25–49.99 acres in size; 28.1 per cent when measuring between 50 and 99.99 acres; 37.2 per cent when between 100 and 199.99 acres, and 64.8 per cent when larger than 200 acres. Farms appraised for between $10,000 and $14,999 were assessed for taxes at 5.6 per cent of their value when they were less than 100 acres in size, 11.5 per cent when they were between 100 and 199.99 acres,

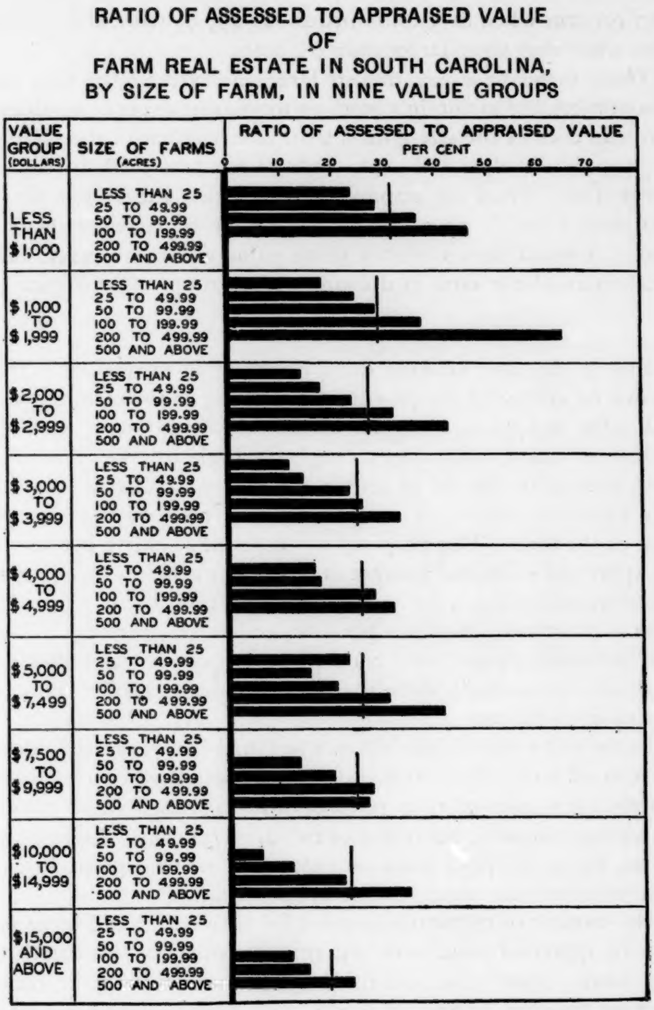

FIG. 3. Although the more valuable properties receive on the average a favorable ratio of assessment, a small farm within a given value group fares better than a large farm in the same value group.

21.7 per cent when they contained 200 to 499.99 acres, and 34.3 per cent when they were larger than 500 acres.

These inequalities are due in large measure to the fact that assessors tend to maintain a more uniform average per acre value on farms in each of the size groups than is warranted in the light of appraised value data and in the light of estimate made by owners themselves. From the standpoint of taxation the system favors the more valuable properties whether they be large or small in area. A small farm within a given value group, however, fares better than a large farm in the same value group. (See Figure 3).

III

One of the most striking demonstrations of inequality is that shown by arranging the properties according to the ratio of assessed value to appraised normal market value beginning with the lowest ratio and continuing through the highest. The investigators, even with the aid of county officials, were unable to locate any record of assessment in the case of 42 properties, or 2.7 per cent of the total. One property was assessed at only 2 per cent of its appraised value and another at only 3 per cent. Three properties were returned at 4 per cent, four at 5 per cent, one at 6 per cent, nine at 7 per cent, nine at 8 per cent, and 13 at 9 per cent. Thus the assessment record on a total of 83 properties was either not available or showed a ratio to appraised normal market value of less than 10 per cent.

At the other end of the scale may be found two properties which were taxed on a valuation in excess of that assigned by appraisers. Another was assessed at 91 per cent of its appraised value, two at 90 per cent, one at 80 per cent, and two at 76 per cent. Eight properties, therefore, paid taxes on valuations which approached or even exceeded the corresponding appraisal figure.

The number of properties assessed for between 10 and 19.99 per cent of appraised value was 385, or approximately one-fourth of the total. More than one-third (521) were assessed at ratios varying between 20 and 29.99 per cent; 318, or about one-fifth, were taxed on the basis of an assessment which was between 30 and 39.99 per cent of appraised value, 138 were assessed for between

40 and 49.99 per cent, 63 between 50 and 59.99 per cent, 21 between 60 and 69.99 per cent, and 15 for 70 per cent or more.

Three per cent of the total *appraised value* of all property was not clearly listed on the tax books, 4.8 per cent was returned at less than 10 per cent of its value, and 31.6 per cent at a figure which was between 10 and 19.99 per cent. These three groups constituted 39.4 per cent of the total appraised value of all properties (and 35.5 per cent of the total value assigned by owners) but only 21.1 per cent of the total value on the tax books. On the other

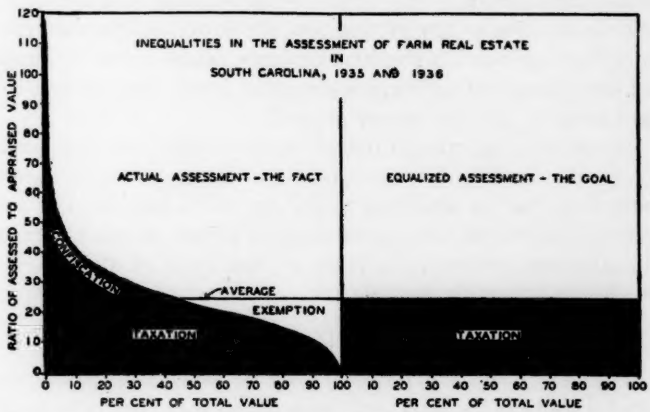

FIG. 4. The excess taxes collected on properties which are overassessed do not go to increase the revenue of government, but to replace payments that should have been made by other property holders.

hand, in the three high ratio groups, 4.9 per cent of the total appraised value (and 5.9 per cent of the total value assigned by owners) accounted for 11.7 per cent of the value for purposes of taxation. These figures clearly illustrate the contrast between assessment in law and assessment in practice. For example, nearly 2 per cent of the total appraised value of all properties included in this study was assessed at 60 per cent or more of its appraised value. More than 10 per cent of the total value was assessed at 40 per cent or more, about 30 per cent at a ratio in excess of 30 per cent, and about 44 per cent of the total value was represented

in properties assessed at a figure which was above the average. Taxation above the average represents varying degrees of confiscation of property while taxation below the average represents a corresponding total of exemptions. In this case less than half of the total of all property values was overtaxed by an amount sufficient to permit exemptions varying from very little up to 100 per cent on more than half of the total value. (See Figure 4).

While equalized assessment may be difficult to achieve in practice, it is certainly not too much to expect that a more scientific policy can approach this goal. Some variations are likely to occur under almost any system, but the gross underassessment of more than one-third of the farm property values in South Carolina and the corresponding overassessment of nearly another one-third can hardly be justified on any grounds.

The per acre appraised value of farms occupied by their owners was greater than the corresponding figure in the case of farms in the control of absentee landlords. The per acre assessed value, however, was greater on non-owner occupied properties with the result that absentee owners paid taxes on the basis of an assessment which was relatively higher than in the case of resident owners.

IV

In summary and conclusion it may be said that based upon a detailed study of the facts with reference to 1544 farm properties in South Carolina, farm real estate is assessed for taxes at approximately one-fourth of its "normal market value" as determined by experienced appraisers.

Variations by counties and by type-of-farming areas are not materially significant and appear to be influenced more by size and value of properties than by geographic location.

The ratio of assessed value to normal market value tends to decline with each increase in average normal market value, ranging in this study from 31.3 per cent on farms having an appraised value of less than $1,000 to 18.8 per cent on those appraised for $15,000 and above. This trend is evident for all years and for all type-of-farming areas and is due to the fact that average assessed value per farm, while showing an increase with each increase in average appraised value, tends to increase at a much slower rate.

Value per acre exerts a powerful influence upon the ratio of

assessed to appraised value of farm properties. Farms appraised for less than $20 per acre were assessed for taxes at a valuation which was 34.8 per cent of the appraised value as compared with 13.0 per cent in the case of farms having a per acre appraised value or $70 or more.

Size of farm affects the rate of assessment in various ways. In this study very few differences were observed in the average ratio of assessed to appraised value in the different size groups. When, however, each of these groups was studied separately the results were very significant. For example, farms in a given size group are frequently quite different in value, both total and per acre, and the greater the value the lower the ratio. Likewise, farms of approximately equal value may vary considerably in size and the larger the acreage (value remaining the same), the higher the rate of assessment.

Nearly one-third of the total number of farms and two-fifths of the total value was assessed at a ratio which was less than 20 per cent of appraised value, while more than one-third of the number and more than one-fourth of the value was assessed on the basis of a valuation which was 30 per cent or more of the appraised value figure. The extremes were from less than 5 per cent to more than 100 per cent of appraised value.

The assessment ratio in South Carolina appears to be somewhat more favorable to owners who occupy their farms than is true in the case of owners who live elsewhere.

The system of assessing property in South Carolina is such that equality of taxation is virtually impossible. Based as it is upon the idea of self-assessment followed by "equalization" at the hands of local boards (appointed by the Governor upon recommendation of the legislative delegations from the various counties) the entire system has degenerated into a farce and has been described as "a classic example of wholesale public lying." This is not a reflection upon the boards which by law are allowed little time and less money for their duties. The basis for reform has many times been made clear, but no action has been taken.[2] It is unnecessary to

[2] Particular attention is called to the very excellent *Report of the Joint Special Committee on Revenue and Taxation Appointed by the General Assembly Session of 1920* ("The Marion Report") and to the Report of the "Committee of Seventeen" appointed in 1925 at the request of the late Thomas G. McLeod, then Governor of South Carolina, and of which Dr. W. H. Mills, now of Clemson College, was secretary. (See also S. C. Experiment Station Bulletins 231, 285, 286, 298 and Annual Reports of the South Carolina Experiment Station for the years 1932 and subsequently.)

repeat here the many thoughtful recommendations which have been made by men deeply concerned and well versed in such matters. Mention should be made, however, of proposals for a constitutional amendment removing general property tax limitations and for making an accurate survey and inventory of the taxable resources of the state. Immediately, however, there appears to be a real and genuine need for a full-time, well-trained, competent person in each county working under the supervision of the State Tax Commission whose duty it would be to maintain a current catalogue of, and a uniform 100 per cent valuation on, all property required to be returned for taxation. The problem is too serious and the inequalities are too grave to justify less effective methods.

ASSESSMENT OF REAL PROPERTY IN FAYETTE COUNTY, KENTUCKY

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*University of Kentucky**

This investigation seeks in the light of constitutional standards:[1] (1) to compare city and county assessment of city property;[2] (2) to compare county assessment of farm and city property; (3) to determine whether uniformity is attained in the assessment of large and small properties; (4) to compare the assessment of unimproved land with other real estate; (5) to ascertain the extent of inequalities in the assessment of individual properties; and (6) to inquire into the flexibility of assessments.[3]

I

Data for the study were secured from the official records of Fayette County and the city of Lexington. A sample of 608 properties was obtained, 459 parcels within the city and 149 of farm property. The "fair cash value" of these properties was assumed to be their sale value as indicated in the deeds of conveyance. Assessment data were obtained from the city and county assessing offices.

In selecting the sample of properties utmost care was exercised to insure its validity. Rules for the elimination of transfers were formulated and closely followed. The most important types of transfers eliminated were: (1) intra-family transfers; (2) forced

* A word respecting the character of the two authors' contributions to this paper is appropriate. Mr. Martin formulated the general plan of the investigation which was independently prosecuted by Mr. Robinson. After the latter had written a report, Mr. Martin rewrote it and prepared the manuscript for publication in the absence of Mr. Robinson.

[1] *Kentucky Constitution*, secs. 171–172.

[2] There is a duplication of assessments within corporate limits.

[3] Choice of this particular locality (Fayette County) is due solely to its accessibility. Subsequent investigation proves its assessment to be superior to that of the average Kentucky county.

sales and foreclosures; (3) transfers involving other than a pecuniary consideration; (4) fractional interest transfers; (5) sales to governmental bodies and to public utilities; (6) transfers with doubtful or indeterminate consideration, as those in connection with which (a) only a nominal consideration was stated; (b) the value of encumbrances assumed by the grantee was indefinite; or (c) the sale value indicated by the deed obviously could not check with the assessed valuation. Under the last rule transfers with an assessment ratio of less than 20 and over 220 were excluded. Transfers to public utilities and governmental bodies were rejected on the assumption that the property might have been condemned. The remaining rules appear self-explanatory.

The difficult problem in choosing the sample was to discover the correct sale value of the property transferred. A federal revenue act requires that stamps be attached to deeds of conveyance equal to 1 per cent of the sale value, less all encumbrances assumed by the buyer. The value indicated by federal stamps was assumed to average an amount equal to the midpoint within the $500 range. For example, a deed with a one dollar stamp attached was presumed to denote a sale value of $750, that is, halfway between $500 and $1,000. The amount of encumbrances assumed by the grantee when it was disclosed by the record was added to the value represented by the stamps. The resulting figure was considered the sale value of the property.

Though use of the sales method as the index of value is open to criticism, it is perhaps as reliable as any in a carefully selected sample. On theoretical grounds it may be condemned, yet it is undoubtedly true that when legislators and framers of constitutions referred to a "fair cash value" assessment of real property they had in mind the sale value of that property. Moreover, the sales method is at present the only practical approach in measuring assessments in many Kentucky counties.

Since the value represented by the group being studied was only about 3.2 per cent of the total assessed valuation of real property by the city and 4.2 per cent by the county, a test as to the adequacy of the sample was desirable. City and farm properties were each divided into groups by random sample and the stability of the average assessment ratio compared by successively adding an incre-

ment of 25 per cent of the total. With the exception of the first computation in each case the ratio never varied as much as 2 per cent. This showed that a sample half as large as the one being studied would give approximately the same results.

II

Tendencies in assessment are revealed in a comparison of city and county assessment of city property. The duplication of assessment machinery in the city of Lexington raises the interesting question of the relative accuracy of the two assessing offices.[4] This question is partly answered in Figure 1. Here is shown the percentage distribution of assessments on the basis of ratios of assessed to sale value of each parcel of property. The horizontal scale represents the percentage of the total number of properties which are "less than" each particular ratio. Ratios of assessed to sale value are indicated on the vertical scale. The Fayette County tax commissioner has, for a number of years, endeavored to assess real estate at 80 per cent of full value,[5] while the city assessor attempts to make a fair cash value assessment. The average assessment ratio is 74.46 per cent for the county and 90.14 per cent for the city. Thus, the county average is somewhat nearer the assessor's less ambitious goal. It varies only 7.5 per cent from an 80 per cent assessment, while the average for the city assessor falls 11 per cent short of a full value appraisal.

The average assessment ratio is not of so much importance as the "scatter" of individual assessments around the average. A marked deviation from uniformity denotes the existence of inequalities. The cumulative frequency curve in Figure 1 indicates that the assessments of both city and county are far from uniform—the range being from 27 per cent to 208 per cent of full value for the city and from 25 per cent to 213 per cent for the county. The coefficient of dispersion, which summarizes the extent of individual

[4] A similar study made in 1932 showed a county average assessment ratio of 54.8 and a city ratio of 60.4. *See* James W. Martin and George W. Patton, "Operation of the Real Estate Tax in Lexington, Kentucky," *The Tax Magazine*, July–August, 1932.

[5] The Court of Appeals has held that, if a county has an assessment level of less than full value, a property comparatively overassessed yet assessed at less than its "fair cash value" may have its assessment reduced to the level of other property. *Eminence Distillery Co.* v. *Henry Co. Bd. of Supervisors*, 178 Ky. 811.

inequalities, furnishes the best measure of uniformity.[6] The coefficient of dispersion for the county assessment was found to be 33.9 and that of the city 26.13. Thus, from the standpoint of

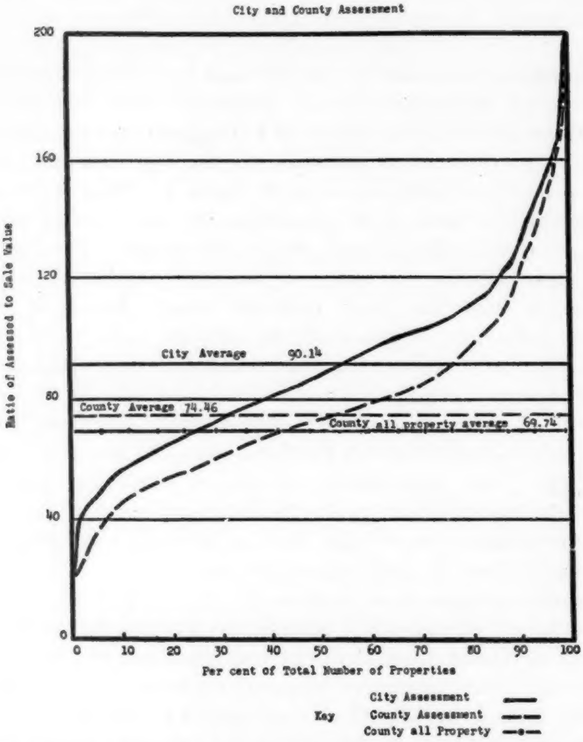

FIG. 1. PERCENTAGE DISTRIBUTION OF FAYETTE COUNTY ASSESSMENTS ON THE BASIS OF RATES OF ASSESSED TO SALE VALUE OF 459 PARCELS OF CITY REAL PROPERTY, 1934–1937

uniformity the city assessment is decidedly superior, though the deviation in both cases appears excessive.

The Pearsonian coefficient of correlation of 0.89 between city

[6] The coefficient used shows as a percentage of the average the difference between the average assessment ratio of properties relatively underassessed and those relatively overassessed.

and county assessments shows that generally properties assessed high by the city assessor are assessed high by the county assessor; those assessed low by one are undervalued also by the other.[7]

But there are many exceptions to this generalization. Some properties show great variation between city and county assessments. A few examples will suffice to illustrate the point. One piece of property which sold at public auction in 1934 for $5,100 was assessed at $5,000 by the county and $9,000 by the city, a variation of 78 per cent between the two assessments. Another, with a sale value of $6,260, was assessed by the county at $2,500 and by the city at $7,000, or respectively 40 per cent and 112 per cent of full value. A third parcel of property which sold for $2,250 was assessed at 27 per cent of sale value by the county and 71 per cent by the city. An example of a fairly closely related underassessment is that of a tobacco warehouse which sold in June, 1937, for $45,000 and which was assessed by the county at $15,000 and by the city at $20,000, or 33 per cent and 40 per cent of full value.

The county assesses farm real estate less accurately than urban. The county average assessment ratio for all property is 69.74, as shown in Figure 2, and the coefficient of dispersion 35.33. The average assessment ratio for farm property is 63.41, which is 9.7 per cent lower than the overall county ratio and 14.8 per cent lower than the average assessment for city property. This means that property owners within the city of Lexington bear more than their share of county and state taxes. The coefficient of dispersion for the farm assessment is 39.75 as compared with the 33.9 dispersion already noted for the county assessment of urban realty. The range in individual farm assessment ratios is similar to that for city property.

Most studies of real estate assessments disclose some measure of rural-urban inequality. Usually farm land has been overassessed.[8]

[7] A coefficient of +1.00 would represent a perfect positive correlation, meaning that the two variables hold the same percentage relationship throughout the entire series; whereas a correlation of 0.00 would indicate no relationship. The correlation of +.89 indicates a high positive correlation and that when properties are overassessed or underassessed by one official a similar mistake will probably be made by the other.

[8] R. M. Nelson and G. W. Mitchell, "Assessment of Real Property in Iowa and other Midwestern States," University of Iowa *Studies in Business*, No. X, p. 150–151; also Joseph D.

The generally accepted explanation of this situation has been the deflated value of farm property during the post-war period.[9]

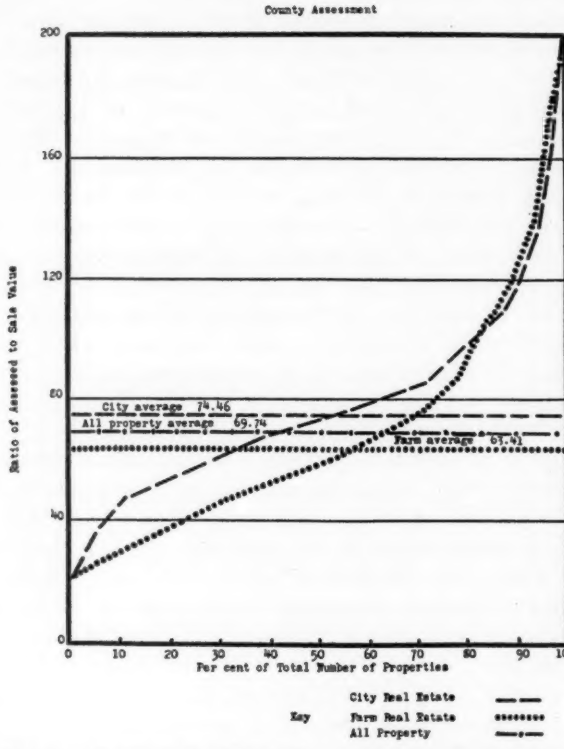

Fig. 2. Percentage Distribution of Fayette County Assessments on the Basis of Ratio of Assessed to Sale Value of 459 Parcels of City and 149 Parcels of Farm Real Property, 1934–1937

Regressiveness appears inevitably to accompany unskilled assessment. Analysis reveals that Fayette County is no exception to

Silverherz, "The Assessment of Real Property in the United States," Special *Report* of the New York State Tax Commission, No. 10, p. 211.

[9] The influence of varying land values on assessment ratios will be considered more in detail below.

this postulate. The entire sample of farm and city property has been divided into six groups according to sale value, ranging in size from Group A, which includes all parcels of property of less than $1,000 in value, to Group F, including those over $16,000. The average assessment ratio and the percentage of properties assessed at more than full value has been computed for each group. The results of these computations are shown in Figure 3 and Table I.

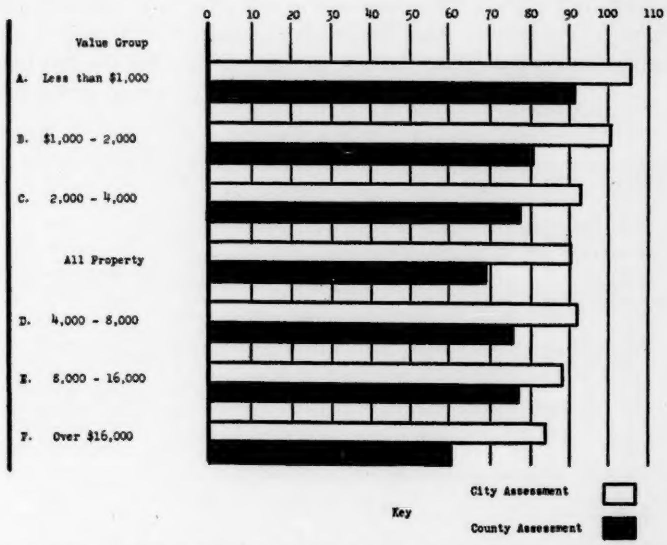

FIG. 3. AVERAGE RATIO OF ASSESSED TO SALE VALUE OF FAYETTE COUNTY REAL PROPERTY BY VALUE GROUPS, 1934–1937

Both city and county assessments result in regressive taxes, the average assessment ratio—and hence the rate of tax—varying inversely with the parcel value in each group. Group A, including 87 parcels of real estate, is assessed considerably higher than other groups by both city and county assessors, the exact ratios being 104.91 and 96.17 respectively. The city overassesses the group by 4.9 per cent as measured by the constitutional standard of assessment and by 16.4 per cent if compared with its average

assessement ratio for all property. Judged by the average assessment ratio for all property the county overassesses the group 29.2 per cent. Groups B, C, and D are also assessed as compared with sale value higher than the average for all property. Group E is relatively overassessed by the county and underassessed by the city. Group F is underassessed by both. Table I shows that practically all groups except Group A have less than their share of properties assessed at more than sale value. Group F is assessed at a smaller average ratio than any other group by both city and county. In contrast with the high assessments in Group A the average asessment ratios for this group are 84.2 for the city and 67.39 for the county. This means that on the average properties

TABLE I

PERCENTAGE OF 459 CITY PROPERTIES ASSESSED AT MORE THAN SALE VALUE BY COUNTY AND CITY BY VALUE GROUPS, 1934-1937

GROUP	VALUE OF PARCEL OF PROPERTY	COUNTY		CITY
		Proportion of total number of properties	Proportion of total number of properties overassessed	Proportion of total number of properties overassessed
		per cent	*per cent*	*per cent*
A	Less than $1,000	19.0	39.53	25.7
B	$1,000- 2,000	18.5	18.6	18.2
C	2,000- 4,000	23.3	23.25	23.0
D	4,000- 8,000	23.1	10.46	19.6
E	8,000-16,000	11.5	6.97	9.4
F	Over 16,000	4.6	1.16	4.1
		100.0	100.0	100.0

in this value group are assessed at 24.6 per cent and 42.7 per cent by the city and county respectively less than properties with a sale value of less than $1,000.

In brief, serious inequalities exist in the assessment of large and small properties by both city and county. County assessments of the lowest value group are considerably more inequitable than are those of the city. Exact causes of such inequalities are difficult to determine. A number of probable causes have been advanced by different investigators.[10] Among them are closer examination of

[10] Eric Englund, "Assessment and Equalization of Farm and City Real Estate in Kansas," Kansas Agricultural Experiment Station, *Bulletin* No. 232, p. 28-29; also W. H. Dreesen, "A Study in the Ratio of Assessed Values to Sale Values of Real Property in Oregon," Oregon Agricultural Experiment Station *Bulletin*, No. 233, p. 43.

small properties, greater impressiveness of large numbers, the political influence, and more frequent complaints of large property owners. It is impossible to say how far any of these factors go toward explaining the inequalities discovered in the present study.

Figure 4 shows the county assessment of farm and city property by value groups. Regressiveness in the assessment of farm real estate is much less pronounced, but a certain amount appears to exist. Unlike the overassessment of city property in Group A,

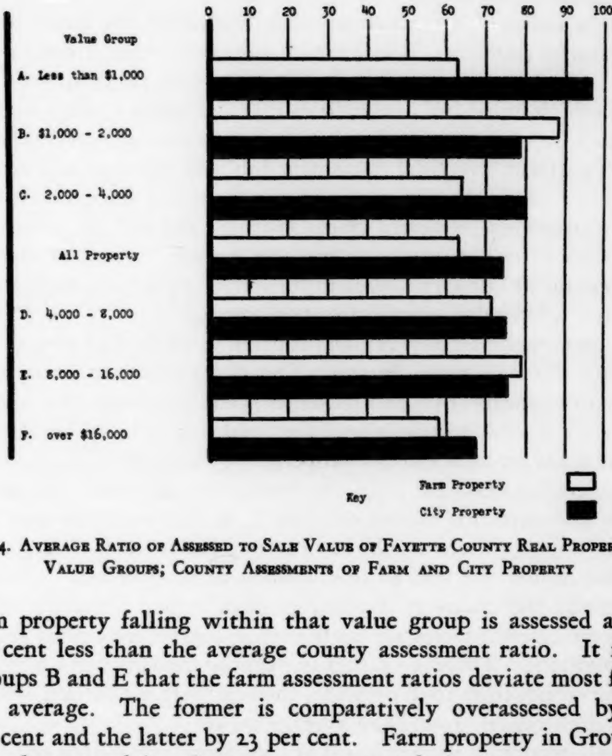

FIG. 4. AVERAGE RATIO OF ASSESSED TO SALE VALUE OF FAYETTE COUNTY REAL PROPERTY BY VALUE GROUPS; COUNTY ASSESSMENTS OF FARM AND CITY PROPERTY

farm property falling within that value group is assessed at 10 per cent less than the average county assessment ratio. It is in Groups B and E that the farm assessment ratios deviate most from the average. The former is comparatively overassessed by 38 per cent and the latter by 23 per cent. Farm property in Group F is underassessed by about 17 per cent and city property only 3 per cent. Most of the groups differ widely from the 80 per cent standard of assessment. A check on the percentage of farm properties assessed at more than full value failed to reveal any significant tendency.

Of the entire sample of city real estate collected, only 11 properties, or 2.2 per cent, were unimproved. This property has been underassessed by both city and county, the average ratios being 79.11 and 58.35 respectively; but the number of parcels is inadequate to be very significant.

Twenty-six per cent of the sample of farm real estate consisted of unimproved land. The average assessment ratio is 57.71, or an underassessment of 9 per cent as compared with the average ratio for all farm property.

It is individual inequalities that constitute the heart of the assessment problem. Rural-urban inequality, regressiveness, and the underassessment of unimproved property merely point the direction which individual inequalities take. Figures 1 and 2 and the coefficients of dispersion already noted prove that assessments are far from uniform. A good assessment job will show a coefficient of dispersion no higher than 20. The coefficient of dispersion for the farm assessment is nearly twice as high, and for the county assessment of city property 70 per cent higher. The coefficient of dispersion of the city's assessment was 26.13 which, though excessive, approaches a creditable performance.

Figures 5 and 6 show the distribution of individual assessments among different ratio groups. The upper chart in each figure shows the distribution on a value basis and the lower on a number basis. Figure 6 includes the entire county sample, no breakdown being made for farm and city property. (The broken line indicates the average assessment ratio; the better the assessment the greater is the concentration around this line.) If the assessment were perfectly uniform there would be only one bar in each chart, and it would follow the broken line upward to 100 per cent. From a glance at the charts it is apparent that little uniformity exists. In every case the ratios are fairly evenly distributed among several ratio groups. There is a rather substantial frequency in a majority of the groups from 20 to over 200, though there is a certain amount of concentration around the average ratio.

If all properties were assessed at a uniform level—high or low—the assessment system could be said to have functioned satisfactorily. Barring legal restrictions, the level of assessments has little to do with the amount of local revenue that will be raised

from the taxation of real estate. If the assessment level is low, a higher tax rate will be levied; if high, a lower tax rate will supply the necessary funds. But when the assessment is high on some properties and low on others, an inequitable tax burden is imposed. If carried to an extreme it might result in impoverishment of some

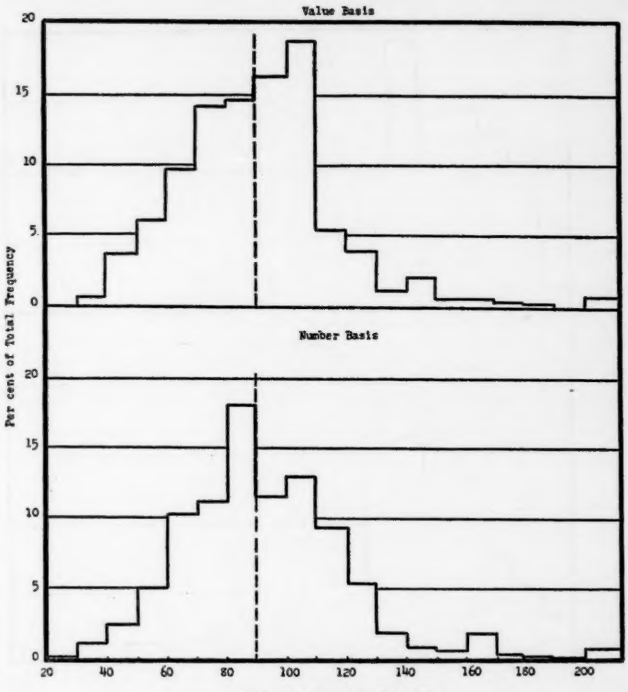

FIG. 5. FREQUENCY DISTRIBUTION OF ASSESSMENT RATIOS FOR FAYETTE COUNTY REAL PROPERTY: CITY ASSESSMENT, 1934–1937

taxpayers and the unjust enrichment of others, due simply to carelessness or discrimination by public officials.

The sample used in this paper includes a fairly even distribution of transfers for each year from July, 1933, to July, 1937. Since one of the nation's worst depressions and a substantial part

of a recovery period were embraced in these years, an excellent opportunity is offered to test the flexibility of the assessment system. In the early part of this period real estate values were extremely depressed. Foreclosures and forced sales occurred frequently. But business soon began its upward swing, and toward

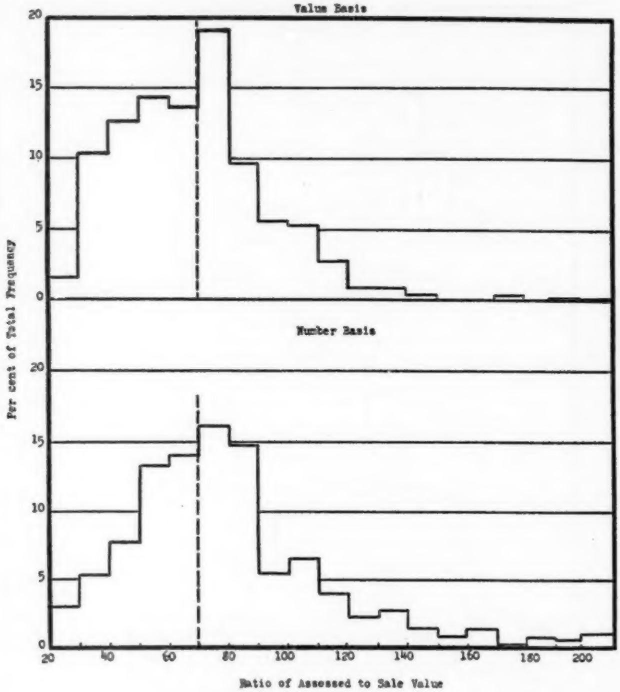

FIG. 6. FREQUENCY DISTRIBUTION OF ASSESSMENT RATIOS FOR FAYETTE COUNTY REAL PROPERTY: COUNTY ASSESSMENT, 1934–1937

the latter part of the period was again near normal. Real estate values generally follow closely the swing of the business cycle. Figure 7 shows graphically the trend of assessments during these years.

County assessment of city property, as shown by the broken

black line, was remarkably stable throughout the entire period, the range being from an average ratio of 72.75 in 1935 to 76.62 in 1936. The city assessment has also been fairly stable but dropped from 95.52 in 1934 to 86.42 in 1937. A close relationship appears to exist in the trend of the two assessments, especially in the last three years.

The average assessment ratio of farm real estate shows wide fluctuations from year to year, ranging from 96.42 in 1934 to 51.44

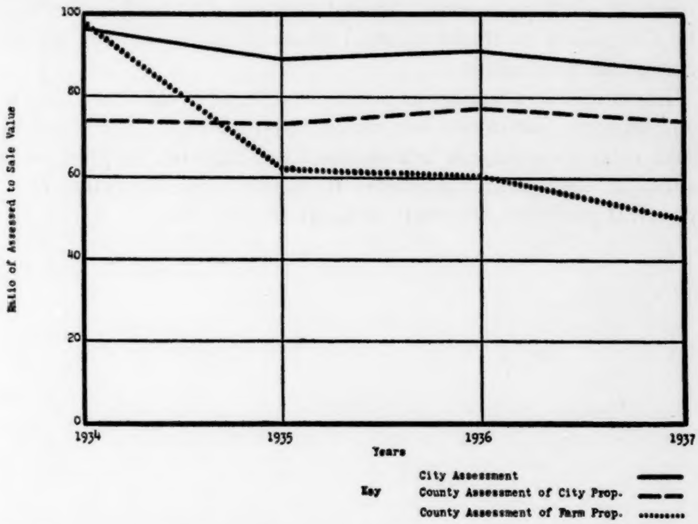

Fig. 7. Average Ratio of Assessed to Sale Value of Real Property in Fayette County by Years, 1934–1937

in 1937. This means a deviation from a 20 per cent overassessment to a 36 per cent underassessment as measured by the county's standard of an 80 per cent assessment—a tremendous variation for such a short period. In 1935 and 1936 the assessment level was practically stationary. The great variation between 1934 and 1937 would appear to be due chiefly to rapidly rising values of farm property and the inflexibility of the county's farm assessment system. This inflexibility might possibly be attributed to roll copying by the county assessing officials.

III

A knowledge of the defects of an assessment system is essential for its improvement. Tendencies noted above prove that assessments in Fayette County fall considerably below the standards of accuracy and uniformity which are legally required. One result is gross inequality. It is believed urgent that such inequalities be removed or at least minimized. Undoubtedly, the most pressing problems are individual inequalities and the relative overassessment of small properties. Special care should also be exercised by the county to eliminate rural-urban inequality arising out of changes in land values.

Experience in a number of jurisdictions has proved that accurate and uniform assessments are not an impossibility. The secret of success is, of course, efficient assessors and deputies, supplied with adequate equipment. Attempts to secure these, however, raise political problems extremely difficult of solution.

ARE LIVING COSTS LOWER IN THE SOUTH?

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One of the most persistent ideas held in the South is that the cost of living is lower in the region than in other parts of the country. There is a very firm belief that not only are living costs lower, but that they are very much lower. The paucity of concrete data to support this contention seldom operates to diminish the tenacity with which it is held. It has become part of the folklore of the region, and, as such, has proved of substantial practical value, especially as a debating point in arguments over wage differentials. In part, no doubt, the idea derives strength from the common confusion between *planes* of living and equivalent *standards* of living. But even when this issue has been cleared up, the claim for lower costs in the South often continues to be advanced with undiminished vigor.[1]

The purpose of this article is to summarize the data we do possess on the subject of relative living costs in the South and elsewhere. Six studies in all are considered, four very briefly and two in slightly greater detail. Three of the studies are of the standard budget type, two involve merely the pricing of specific articles of consumption in the South and elsewhere, and one represents an ingenious application of one of Engel's laws of consumption to the problem.

Of the studies of the cost of living in different parts of the country perhaps the most convincing, and certainly the most elaborate, are those that involve the pricing in various localities of an artificial budget deemed to represent a certain standard of living

[1] The writer frequently has discussed the matter with Southern students in college economics classes, pointing out the nature of the problem and the limitations of the data. In perhaps a quarter of the cases the effects of these discussions, as disclosed by examination papers, can best be characterized by reference to the title of a recent best-selling novel about the South.

for a particular group in the population. But some difficulties in the use of this approach should be noted. First, it is very often difficult to make sure that articles of the same *quality* are priced in each locality. Second, the *quantity* of an article used in one area may differ considerably from the quantity used in another, and to the extent that this is true comparisons are artificial. More ice, for example, is used in the South than in the North, but less coal. The North uses more mechanical household appliances but fewer servants than the South. And so on. In elaborate studies, some allowances for the quantitative proportions in which commodities and services are consumed in different regions can be made, but the difficulty probably cannot be removed entirely.[2] In interpreting the results of cost-of-living studies, furthermore, comparisons should be made whenever possible between places of approximately the same size.

I

The oldest, and the most frequently cited, study of any value in this field was published by the National Industrial Conference Board in 1920.[3] The board set out to determine how the minimum annual cost of living for a family of five in three Southern mill towns—Greenville and Pelzer, South Carolina, and Charlotte, North Carolina—compared with the cost in Fall River, Massachusetts. The cost of the items in the budget employed in the study was somewhat lower in Fall River than in any of the three Southern cities.

Berglund, Starnes, and deVyver collected and compiled food prices in New England and the South for specified months in 1928 and 1929.[4] They found that, except for meat, which was lower in the South, the cost of food was much the same in the two regions. The significance of this fact arises from the high percentage of the average wage earner's income that is spent for food. These investigators did not claim, of course, that their work showed conclusively the absence of any appreciable differences in living costs between the two regions.

[2] Professor Ogburn's method for getting around this difficulty is described below.

[3] National Industrial Conference Board, Special Report No. 8, May, 1920.

[4] A. Berglund, G. T. Starnes, F. T. deVyver, *Labor in the Industrial South*, Chap. 9.

In his book on barriers to research in the South, published in 1932, Wilson Gee devotes a chapter to the subject of living costs.[5] He comes to the conclusion that "the view that living in the South is cheaper than in other parts of the country is largely mythical in character."[6] Like Berglund, *et al.*, Gee secured the prices of specific commodities in and out of the South—the prices not only of food, but also of electricity, gas, coal, and housing. His prices, obtained from the Bureau of Labor Statistics, relate to cities of approximately similar size in the South and in the North and West for June, 1931. He found little difference in food costs among the regions; electricity and manufactured gas costs were distinctly higher in the South; natural gas and bituminous coal were slightly more expensive in the South; anthracite coal costs were slightly higher elsewhere; rents averaged about 7 per cent lower in the South.

William F. Ogburn employed an interesting device for measuring differences in living costs.[7] He made use of the most valid of Engel's laws; i.e., as the income of a family increases, the percentage of the income spent for food decreases. His assumption is that if at a given time families of a given size and income spend less for food in one region than in another the cost of living is lower in that region. Ogburn, using data on family budgets collected by the Bureau of Labor Statistics in 1918–19, calculated the food expenditures of families consisting of husband, wife, and children aged 2, 7, and 11 years, with annual incomes of $1,300, for 13 Southern and 33 non-Southern cities. He found negligible differences between the two groups of cities in the proportion of income spent on food. Hence his conclusion that "this investigation does not show that it is cheaper to live in the South, but rather that the costs are the same in the South as in the rest of the United States. We infer then that the popular opinion that it is cheaper to live in the South is based upon false comparisons or unsatisfactory concepts."[8]

[5] Wilson Gee, *Research Barriers in the South*, Chap. 5.

[6] *Ibid.*, p. 52.

[7] William F. Ogburn, "Does It Cost Less to Live in the South?" *Social Forces*, December 1, 1935.

[8] *Ibid.*, p. 214.

II

Two recent studies of the budget type should be summarized somewhat more adequately.

The National Industrial Conference Board has obtained cost of living data for 70 cities in February, 1935, 55 cities for March, 1936, and 59 cities for March, 1937.[9] The 59 cities for 1937 were grouped as follows: East, 20; South, 11; Middle West, 22; Far West, 6.[10] In general, only the 1937 data will be referred to here.

In making the survey a uniform budget was used for all cities, with some variations dictated by peculiar local conditions. The budget was designed to maintain a family of four persons, composed of husband, wife, and two "average" children—the cost of living of two average children was obtained by taking two-thirds of the cost of maintaining a boy aged two years, a girl aged eight years, and a boy aged twelve years. The food budget was an average of "an adequate diet at moderate cost" and "an adequate diet at minimum cost" prepared by the Bureau of Home Economics of the Department of Agriculture, and adjusted for some seasonal and regional requirements. (Salt pork, for example, was substituted for some other meats for the South.) The standard for housing accommodation was a 4½-room dwelling with bath; the board points out with regard to rents that "the results do not show the differences in cost of identical types of dwellings, but the approximate difference in cost of the types of dwellings usually inhabited by wage earners in the localities surveyed." The budget also included clothing, fuel and light, and sundries: carfare, upkeep of automobile, admissions to motion picture theatres, reading matter, medical care, haircuts, household remedies, house furnishings, tobacco, candy, organization dues, and a few other items. In general the budget seems comprehensive and carefully worked out.

In the 59 cities as a whole the average weekly cost of maintaining this budget, including upkeep of automobile, in March, 1937, was $28.00. The cost in the individual cities varied from $24.86 to $31.46, a difference of 25.5 per cent between the least

[9] National Industrial Conference Board, "The Cost of Living in 59 Communities", *Conference Board Bulletin*, July 31, 1937.

[10] Nine of the 11 cities in the Southern group fall within Odum's definition of "South".

and the most expensive city. On a regional basis, average living costs were lowest in the South and highest in the Far West in March, 1937.[11] The spread between these two regions, however, was only 7 per cent. The difference between the average cost for the 11 Southern cities and for the 59 cities as a whole was 3.5 per cent. (These percentages differ slightly if the cost of automobile upkeep is excluded.) Obviously, the differences in living costs were greater among the cities than among the regions. Although the board does not present data for the individual cities, it seems reasonable to suppose that variations among cities within the regions were considerably greater than variations among the regions.

By all odds the most comprehensive study yet made is contained in a 216-page monograph, entitled *Intercity Differences in Costs of Living*, issued by the Division of Social Research of the Works Progress Administration.[12] The following quotation indicates the nature of the study and some of the problems encountered:

> This study was designed to find out how much a 4-person industrial, service or other manual worker's family would need for self-support at 2 specified levels of living in each of 59 cities in the United States; to ascertain how much costs differed among the cities; to compare costs at a basic maintenance level with costs at one reduced at certain points to meet the demands of emergency conditions; and to determine what circumstances were responsible for observed intercity cost variations.
>
> To answer these questions new techniques were necessary. These entailed establishing the contents of the levels of living priced; maintaining their comparability under varied conditions of climate and size of community; and insuring that all the large number of persons necessarily employed in collecting prices had the same objectives in view. From construction of the budgets to analysis of the data problems were presented for the solution of which there were neither precedents nor analogies. Experimenting and testing were necessary at every stage as the work progressed. Like the results of many other investigations of social phenomena, the findings are indicative or approximate rather than

[11] In February, 1935, lowest costs were found in the Middle West, and in March, 1936, in the South.

[12] Margaret Loomis Stecker, *Intercity Differences in Costs of Living in March, 1935, 59 Cities*, Research Monograph XII, Division of Social Research, Works Progress Administration.

exact measurements. The quantity budgets are generalized statements of average needs; judgments to some extent necessarily entered into the specifications, and into the sampling and pricing procedures used. On the other hand, the completeness of the details insures a reliability to the conclusions which might not be justified were the findings built up from a less exhaustive analysis.[13]

The family whose costs of living are measured in this investigation is best described as "the unskilled manual worker type," consisting of a husband, wife, boy aged 13, and a girl aged 8. Two very detailed budgets were devised. The *maintenance* budget includes a four- or five-room house or apartment, with water, sewer connections, indoor bath and toilet; gas, electricity, and a small radio, but no automobile, are provided for; allowance is made for an adequate diet at minimum cost; clothing, furniture, furnishings, household equipment, medical care, a daily newspaper, movies, carfare, taxes, and numerous incidental expenses are included in the budget. In the *emergency* budget "this four person family has cheaper kinds of food to secure the same nutritive values as the maintenance budget provides. Housing is less desirable. There is less frequent replacement of clothing, furniture, furnishings, and household equipment. Household supplies are less plentiful; other services are reduced in quantity or eliminated entirely."[14]

No allowance is made in either budget for carrying or liquidating debts or for saving, except for small amounts of life insurance. Neither budget was designed to indicate a desirable standard of living; the maintenance budget, however, affords more than a "minimum of subsistence" living, and the emergency budget is above current relief standards. The prices of the items in these budgets were secured for March, 1935.

The average total cost of the maintenance budget in the 59 cities at March, 1935, prices was $1,261; the highest cost, $1,415 was found in Washington, D. C.; the lowest cost, $1,130, in Mobile, Alabama. The difference between the highest and lowest city at this level was 25.2 per cent. The average total cost of the emergency budget in the 59 cities was $903; the highest

[13] *Ibid.*, p. 123.

[14] *Ibid.*, Introduction, p. xiii.

cost, $1,014, was again found in Washington, D. C.; the lowest cost, $810, in Wichita, Kansas. The difference between the highest and the lowest city at the emergency level was also 25.2 per cent.

Thirteen of the 59 cities covered by the survey are located in the South[15]—Atlanta, Richmond, Norfolk, New Orleans, Memphis, Winston-Salem, Louisville, Jacksonville, Columbia, S. C., Knoxville, Birmingham, Little Rock, and Mobile. The average cost of the maintenance standard in these 13 cities was $1,208; the average cost for the 46 non-Southern cities was $1,276.[16] In other words, the cost of the maintenance budget in the Southern cities averaged about 5.4 per cent less than the cost in the non-Southern cities. The difference between the average for the Southern cities and for the 59 cities as a whole was only 4.2 per cent. Precisely the same percentage differences are found when the average cost of the emergency budget in the Southern cities is compared with the cost in the non-Southern cities and with the 59 cities as a whole. This is the more remarkable in that the non-Southern cities include New York, Chicago, and other great metropolitan centers. If the larger cities had been eliminated, the percentage differences between the Southern and non-Southern cities would have been even smaller.

It is interesting to observe that living costs varied more widely among the Southern cities than between the averages for the Southern and non-Southern cities. At the maintenance level, the difference in cost between the most expensive and the least expensive Southern city was 12.2 per cent; at the emergency level, 11.7 per cent.

III

These very brief summaries do not do justice to these cost-of-living surveys. The excellent W. P. A. study, in particular, should for a long time serve as a model for undertakings of this nature. But our primary purpose was to see what light cost-of-living surveys threw on the problem of living cost differentials between the South and the remainder of the country. The ac-

[15] Odum's definition of "South" is used.

[16] Simple arithmetic mean employed in computation.

cumulation of data in the field has become fairly substantial. Even when the limitations of the data are fully recognized, at least two conclusions can be reached:

1. There is no *wide* cost differential for equivalent standards of living between the South and the rest of the country, although a small favorable differential may exist.

2. Variations in living costs within the South are considerable.

Both of these conclusions are important in terms of practical action in various fields of social and economic policy.

BOOK REVIEWS

Monetary Policies of the United States, 1932–1938. By James D. Paris. With a foreword by Benjamin Haggott Beckhart. New York: Columbia University Press, 1938. Pp. xviii, 198. $2.75.

This is an appraisal of the monetary policies of the New Deal to the spring of 1938. After a brief and inadequate discussion of "underlying conditions," consisting mainly of a description of the banking holiday, the author devotes the bulk of his book to a discussion of the manipulation of the gold dollar and the administration's silver policy. The latter is good, although colored by the author's views. Brief attention is given to changes affecting the Federal Reserve note and the national bank note. The discussion ends with an appraisal consisting principally of a repetition of points previously made. The author recommends that the United States return to an international gold standard, stop buying silver, and retire the greenbacks. Two long appendices give chronologies affecting gold, silver, and other monetary items and portions of laws, proclamations, messages, etc., affecting money. The bibliography is mainly a list of public documents interspersed with the writings of New Deal critics.

Many elements of the New Deal's monetary policies deserve condemnation but this book does not promote sound and constructive criticism. Rather, the author's obvious prejudice tends to put the reader on the defensive. Criticisms are interspersed with description in such a way as to create a suspicion that the presentation is biased. Two apparent inconsistencies point in the same direction. The foreword criticises the administration for assuming "a mechanical arithmetic relationship" between money and prices, but early in the text (pp. 8–9) the author quotes with approval Kemmerer's statement that prices must ultimately rise in the same proportion that the dollar was devalued. Still later, however (pp. 106–107), he attempts to show that the price rise which did occur could not have been caused by devaluation. Also,

he complains (pp. x, 39) of the tendency to concentrate and centralize monetary powers in the federal government, but in discussing the national bank note he asks (p. 97), "Why not unify and make only one [banking] system, and that a federally chartered and controlled one?"

Two mistakes indicate the lack of a full understanding of the material involved. On page 56 the author states that the President "would have been entirely within the letter of the law" if he had, immediately after the passage of the law nationalizing silver, revalued gold to $20.67 per ounce. The law of January 30, 1934, however, specified that the weight of the dollar should not be more than 60 per cent of its old weight. Similarly, he states (p. 99) that Federal Reserve bank notes authorized in 1933 differed from Federal Reserve notes, "if at all, only in the probable ease and laxness which was expected to attend their issue." One important difference was that they did not require a 40 per cent gold reserve.

With a better presentation of the material the unsound policies would speak for themselves more convincingly than the author is able to speak for them.

University of Virginia B. U. Ratchford

An Introduction to Money. By W. A. L. Coulborn. New York: Longmans, Green & Co., 1938. Pp. xvi, 277. $2.20.

To Mr. Coulborn, J. M. Keynes is a demi-god. In this book, intended for beginning students of economics, he makes his devotions by attempting to "expound in an introductory and elementary manner the ideas" of Mr. Keynes and his followers.

The usual elementary monetary concepts, given in the first five chapters, are brief and superficial, the author frequently using simple pedagogical devices of the type found in secondary texts. Like many others, he defines credit as "belief in future payment" and then never uses the term in that sense again. The next topics are the value of money, Fisher's quantity theory, and Keynes' theories as developed in his *Treatise* and *General Theory*. Here the author largely abandons pedagogical tricks and presents the briefest and simplest exposition of the bare essentials of Keynes' ideas which has yet come to the attention of the reviewer. Even

so, however, it is doubtful whether beginners, after reading it, would have a fair idea of what Keynes means.

The best feature of the book is the discussion of foreign exchange, including such recent developments as the stabilization funds and the forward market. The method of quoting forward rates is explained. The relation between the gold standard and the functioning of the exchanges is admirably presented. The last seven chapters deal with fluctuations in the value of money, the organization, powers, and practices of central banks, and the objectives of monetary policy. Thus the book gives an extensive, if superficial, view of almost the whole field of money and banking.

In general the author favors England's present monetary arrangement, which he calls the gold reserve standard. He thinks that in a depression a currency tax might stimulate recovery; he considers no arguments against it but states that there is "nothing intrinsically unsound" about it. As an objective of monetary policy he favors full employment, which he thinks can be realized consistent with stable prices and the elimination of the trade cycle.

University of Virginia B. U. Ratchford

Corporation Finance. By Kenneth Field. New York: Ronald Press Co., 1938. Pp. xvi, 529. $4.00.

Taking as a major premise that: "the organization of new companies is a relatively unimportant part of present day corporation financing. The recasting of existing financial structures and the consolidation of existing companies into larger enterprises overshadow the small company promotion" (p. 5), this textbook on corporation finance devotes twelve of its 30 chapters, or 236 of its 516 pages, solely to the problems of expansion and consolidation and an additional 3 chapters to reorganizations due to failures. While treating all of the important methods of effecting consolidation, the holding company justifiably receives major attention. The financial chicanery too frequently found in such organizations is by no means overlooked. The chapters on consolidation and expansion, as a group, constitute by far the most valuable part of the book and, of these, the discussion of segregated risk financing (chapter 10) is perhaps the most suggestive.

The other chapters in the book give a somewhat meager treat-

ment of subjects generally found in textbooks on corporation finance, namely, the nature of the corporation, corporate securities, working capital, investment banking, financial structure, and 3 chapters on income and its distribution. The chapters on these topics, on the whole, do not treat sufficiently the subject matter and are not well enough integrated with the chapters on expansion and consolidation for the book to give the well-rounded discussion of the more important principles and problems of corporation finance desirable for beginning students of the subject, to which group the book is obviously addressed. The author, trained in law as well as in finance, gives considerable attention throughout the book to legal matters.

It seems to this reviewer that Professor Field's contribution would have been decidedly greater had he limited the subject matter of his book solely to the financial and legal problems involved in consolidations, expansion, and reorganizations. He has shed considerable light on these problems and, without lengthening his book, could have treated them even more fully had he assumed an elementary knowledge of the principles of corporation finance on the part of students using the book, thus obviating the necessity of including chapters on these more elementary concepts. In so doing, the organization of the subject matter could have been decidedly improved.

University of Florida JOHN B. MCFERRIN

Modern Money. By Myra Curtis and Hugh Townshend. New York: Harcourt, Brace & Co., 1938. Pp. ix, 291. $2.50.

Some years ago Professor Irving Fisher made a list of the fourteen men in the United States who really understood the subject of money. If the list has not lengthened greatly in the last few years it is no fault of the writers on the subject, for they have sent forth a formidable array of treatises and near-treatises. The American edition of *Modern Money* covers an astonishing number of aspects of the whole monetary question in a relatively brief compass (282 pages). As the preface indicates, "The authors treat money as credit and thus avoid the inconsistencies and obscurities which come from making an artificial distinction between money and credit." To them money is as money does.

The first six chapters, Characteristics of Modern Money, The Quantity of Money, Money Income, Disposal of Money, Accumulation of Money Capital, and Interest on Money contain the heart of the theory. Aside from giving an extremely realistic picture of the credit mechanism as it functions today in countries with well developed banking systems (illustrations are almost always from Britain and the United States), the authors have attempted to think through the always baffling question of saving and spending in relation to income production and capital accumulation. The authors are "spenders." It is doubtful whether they would admit that drouth or earthquake could reduce national income if the volume of spending were properly maintained. They favor a low rate of interest and a slowly but gradually rising price level. Though they repeatedly warn against the evils that lurk in the wake of loss of public confidence in the value of money, there is a feeling that their tongues are in their cheeks and that they prefer even such evils to those of deflation. With this philosophy the reviewer is inclined to agree, with the reservation of much more sympathy for the sufferers from rising prices. The attempt in general to integrate the theory of money with value and distribution theory is highly commendable and quite successful considering the brevity of treatment.

The remaining chapters, Markets in Money Titles, Public Borrowing, Money and Prices, International Monetary Relations, and Monetary Control, present little of interest to the reader fairly familiar with the subject matter but are splendid brief summaries for those who must run as they read.

Several rather obscure passages slightly mar what is otherwise a very readable and excellent piece of work.

University of Kentucky RODMAN SULLIVAN

When Capital Goes on Strike. By Arthur Dahlberg. New York: Harper & Brothers, 1938. Pp. xxiii, 218. $2.50.

The author holds that depression occurs when capital goes on strike. "No deliberate cessation of investment is involved, but it is a genuine strike none the less. Banks are bursting with money, but timid owners will not spend it for investment."

As a remedy the author proposes a tax on hoarding—that is, on

the holding of money. The proposal will no doubt be familiar to many readers of the book, at least in the form of stamp money. Dr. Dahlberg does carry the discussion considerably farther than previous writers, and his discussion of monetary economics has the merit of being clear and realistic.

University of North Carolina E. M. Bernstein

The Call Feature in Municipal Bonds. By the Committee on Municipal Debt Administration of the Municipal Finance Officers' Association of the United States and Canada. Chicago: Municipal Finance Officers' Association, 1938. Pp. ix, 118.

The unusually low yield rates prevailing on government bonds for the last few years has enabled governmental units having bonds outstanding which contained an optional maturity clause to secure phenomenal reductions in debt service charges by calling such bonds and refunding at lower interest rates. The success of such refunding has in turn caused finance officers and students of government finance to give more attention to the call feature for government bonds. This study is a result of such increased interest and is particularly timely.

In the monograph a scientific analysis is made of the experience of a number of governmental units, particularly municipalities, with callable bonds, and conclusions then drawn as to the advantages and disadvantages of the feature for municipalities. The arguments pro and con for the call feature are considered for all the major types of securities issued in municipal financing, including special assessment and municipal utility bonds. A number of advantages to be derived from the call feature are pointed out, including the greater flexibility in the debt program and the possibility of saving on interest cost in the case of securities issued at high rates (whether due to the general market rate or the poor credit rating of the municipality at the time), but at the same time it is recognized that there may be many offsetting disadvantages. Due to the opposition of dealers and bond buyers to callable bonds, an analysis of which is given in the study, the cost of financing may be increased by the inclusion of a call feature that may never be used. For this and a number of other reasons, the conclusion is drawn that before the call feature is included due consideration

should be given to the purpose of the bond issue, the relative cost of the call feature, the prevailing interest rates as compared to the long-term trend, the nature of the outstanding securities and the long-term debt program, and the nature and regularity of the revenues available for retiring municipal indebtedness.

Although written primarily for finance officials, the study should be of interest to all students of government finance. Several appendices and a selected bibliography are included. The methodology and most of the statistical material are included in the appendices.

Guilford College W. O. Suiter

Labor's Progress and Some Basic Labor Problems. By Harry A. Millis and Royal E. Montgomery. New York: McGraw-Hill Book Co., 1938. Pp. xvi, 584. $3.75.

The rapidly increasing number of major subjects that must be included in any exhaustive and detailed treatment of the economics of labor makes it difficult if not impossible to treat them within the confines of a single volume. In the future one volume texts must be confined to specific problems within the field or else be written in such a manner as to cover each phase of the subject in a superficial and unsatisfactory manner.

The volume under review is the first of a series of three on the general subject of the economics of labor. This volume discusses in a detailed manner the progress of labor in the United States since 1820 and analyzes some of the basic labor problems; the second, now published, deals with the important subjects of labor's risks and social insurance; and the third, now in preparation, will be confined to an exhaustive treatment of organized labor. When the third volume appears this series will provide for the use of advanced students in labor economics the most complete and detailed treatment of the subject yet to appear.

The first volume begins with a chapter which describes the forces that form the background of our present day labor problems and indicates the method of attack to be followed in treating these problems. In the second and third chapters the authors endeavor to present the more essential facts concerning the trend of the real earnings of different groups of workers, to compare

the trend of real earnings with the trend of per capita real income, real income per person gainfully employed, and to measure labor's aggregate share of the national income and of the income produced by particular industries over periods of years. These chapters are largely statistical and analytical, much of the statistical data having been borrowed from the works of Professor Douglas and others.

The chapter on wage theory is largely theoretical in nature. Its purpose is to discover the forces in our system of competitive or quasi-competitive capitalism that govern the share of the national income going to the workers in the form of income and to what extent these forces are subject to guidance and control. The chapter not only explains the marginal productivity theory of wages and discusses its underlying assumptions, but an attempt is made also to verify inductively the marginal productivity analysis.

The chapter dealing with governmental regulation of wages describes the development of wage regulation by governmental authority in other countries and in the United States. In dealing with minimum wage problems in the United States emphasis is placed on the constitutional problems. This chapter was written before the passage of the Labor Standards Act of 1938; hence there is no discussion of this important legislation.

There are other chapters dealing with such important problems as women in industry, child labor, and hours of work.

While most of the chapters in this volume are prefaced by a brief historical background, the treatment of the various subjects is largely of an analytical and expository nature with the main purpose to give the student "a picture of what has occurred and a suggested analysis of why it has occurred." A mass of statistical data serves as a basis for theoretical analysis and conclusions. The long footnotes will no doubt prove tedious reading for the average student, but more serious students of labor economics will welcome this valuable addition to the relatively few books suitable for their use.

University of Virginia GEORGE T. STARNES

Labor Problems and the American Scene. By Lois MacDonald. New York: Harper & Brothers, 1938. Pp. xiii, 878. $3.50.

This text book approaches labor problems as a study of the motives, attitudes, and feelings of the workingman. It frankly states that the behavior patterns of individuals as well as groups germinate directly from our American culture and capitalistic (profit-guided) economy. Patently, instead of postulating that economic behavior is rational, the approach suggests that a worker's demands and his method of achieving those demands ultimately arise from the economic system in which he moves. Thus, if his demands may be satisfied within a profit-guided economy, he tends to cooperate with and harmonize with the employer. If, on the other hand, his demands run counter to the major assumptions of the private enterprise system, he inevitably runs into disputes and struggles. In the last analysis, then, the chief task in gaining an understanding of present-day labor problems is to examine the milieu which shapes both the nature of a worker's demands and the instruments to satisfy those demands. To do so, the student may not rely solely on conventional categories of price, marginal utility determination of wage rates, etc. Of course, an understanding of such "economic laws" is basic. But the significant part for the student to recognize is the reaction and conduct of workmen and labor groups when subjected to environmental pressures.

Such an approach, it is obvious, requires not only a handling of material included in the conventional text books on the subject, but also a detailed survey of the "American Scene." On both points, Miss MacDonald does an admirable job. For our purpose, however, a brief description of the latter treatment is of interest. She contends that in most industrialized nations social imitation (social pressure) plus the original equipment of man casts "desires" into four "rather well-defined" classifications: the drive for status, the drive for income, the drive for security, and the drive for collective action. While these drives (pressures) tend to be constant, variations in economic life appear because of "different geographic conditions, historical backgrounds, ethnic mixtures, religious and cultural traditions." A good share of her book, hence, is a critical examination of those variations in America.

For instance, she includes chapters on the workers in cities and "middletowns," the declining towns, the coal camps, the textile mill villages; the workers in the key industries like steel, automobiles; the white-collar worker, the Negro worker, the Southern agricultural worker, etc. Other sections, besides those on the machine industry, the labor movement, the employer approach, etc., deal with the rôle of government in labor problems. The author points out, quite correctly, that the traditional view of government in labor disputes as that of a neutral agent, "an arbiter of rival claims," is hardly a realistic picture. It abjectly fails to reckon with political situations; for, as a matter of fact, governmental agencies tend to enter the field "at the urgent request" of *one* of the parties. That is rather an important point; and in the future it promises to assume increasing significance because C.I.O. unionism, it seems safe to prophesy, implies a continually widening political influence. In other words, unionism must be looked on as a gradual accumulation of *social power*.

This volume, in conclusion, is a useful addition to the literature on labor problems. Its extensive biliography, furthermore, is of immense value. And even though the theoretical and "scientific" labor economist probably will bemoan its lack of abstract wage theory, the book's realistic approach to labor phenomena recommends its careful attention by those interested in the labor field.

Brookings Institution. JOSEPH J. KING

The Industrial Worker. By T. N. Whitehead. Cambridge: Harvard University Press, 1938. 2 vols. Pp. xiv, 265; viii, 10, 81. $5.00.

In 1927 the Western Electric Company, manufacturer of telephone equipment, set up a test room in an attempt to "learn more about its workers." Over a period of five years the investigators accumulated extensive records of the work activities of, and the physical and social influences acting upon, a group of five female operators engaged in assembling relays on a group piece work basis.

In the present volume Professor Whitehead presents his analysis of the voluminous data collected over five years in connection with the experiment. He set out to determine the validity of

the assumption made on the part of those conducting the test room experiment, "that physical circumstance provided the real variables and that social factors could be held constant," (p. 103) only to find that the reverse was true. Changes in physical factors had little, if any, direct influence upon output. Length of workday and workweek, changes in length and arrangement of rest periods, hours of sleep of the operators, seasonal variations in temperature, extreme hot and cold waves, fluctuations in humidity, and other physical changes, introduced experimentally or uncontrolled, failed to influence output to any marked degree, if at all. The author concludes that where the whole range of physical circumstances, collectively needed to maintain a good working situation, are within the comfortable capacities of the operators, the change in one of the factors does not directly change the working speed.

The fluctuations in rate of output, and they were considerable, the author found to be "closely related to the personal and social situation of the various operators . . . bound up with changes in physical circumstances" (p. 91). The correlation of output with fluctuations in attitudes of the operators have been minutely analysed and described. The general upward trend in output rate, extending over a period of several years, was found to be largely the result of the participation of the operators in determining their working conditions. Changes in the social situation as, for instance, a change in the seating arrangement of the operators showed a definite fluctuation in the rate of output of the operators involved.

With this laborious analysis of a mass of data Professor Whitehead has made a real contribution to the understanding of the working habits of the manual worker, and it may be hoped that this study will encourage others to seek answers to the questions which creep up in the mind of the reader of this volume, but to which this study has provided no answer.

Eighty-one sets of graphs, comprising several hundred figures, make up the second volume. This presentation, an analysis in graphical form of the extensive statistical material upon which the study was based, reveals good craftsmanship and aids the reader in comprehending the relative significance of the points

made in the study. This reviewer fails to see the advantage of presenting the graphical material in a separate volume; however, this point is debatable.

Tennessee Valley Authority RUDOLF F. BERTRAM

Intercity Differences in Costs of Living in March 1935, 59 Cities. By Margaret L. Stecker. Washington: Works Progress Administration, 1938. Pp. xxvi, 216.

The materials presented in this study are the outgrowth of an investigation to determine the costs of family living in 59 separate cities at two specified levels of living, namely, "basic maintenance" and "emergency." Costs of living were obtained by pricing at retail the goods and services comprising each of the two designated quantity budgets. The resultant findings show for the first time "how much is required for support at a uniform level of living in a large number of places at the same time, or how these costs compare on an intercity basis." The family whose living costs at the two levels have been measured "is best described as the unskilled manual worker type" and consists of a moderately active man, a moderately active woman, a boy age 13, and a girl age 8. The average annual cost of living for a family of this type in 1935 was $1,261 at the maintenance level, and $903 at the emergency level. The cost has risen since March, 1935.

The usefulness of the findings to the social scientist can but be suggested, for they comprise 86 tables, a number of charts, comparative analyses, and a discussion of methodology. The costs at the maintenance level ranged from $1,130 in Mobile to $1,415 in Washington, tending to be somewhat below the average in the smaller cities and in the South Central States. The many exceptions preclude the formulation of any general proposition with respect to the effect of size and location upon the cost of living by city. The most expensive cities were with several exceptions not the most expensive for each budget item, nor were the least expensive cities the least expensive for every item. In general, combined food prices showed the smallest variation from city to city, and, as one would expect, rents showed the greatest variation, being 116 per cent higher in Washington, D. C. than in Portland, Oregon. "Clothing, clothing upkeep, and personal care cost dispersion

more nearly approached that of food; household operation and miscellaneous family needs cost dispersions more nearly resembled that of rent. Some of the widest cost variations were found for subgroups within these classifications, and individual commodity and service prices differed most of all."

If enough studies of comparative costs and income levels by size of city were made and then analyzed in combination with certain factors that tend to push up the level of income of urbanites, it would be possible to determine to what extent the conglomeration of population in the larger cities operates to depress overall per capita income. The W.P.A. might well undertake such a study—even though urban realtors howl.

Duke University JOSEPH J. SPENGLER

An Economic History of Modern Britain—Machines and National Rivalries (1887–1914) With an Epilogue (1914–1929). By J. H. Clapham. New York: Macmillan Co., 1938. Pp. xiv, 577. $7.00.

Dr. J. H. Clapham has completed his monumental three-volume *An Economic History of Modern Britain*, first publicly announced in 1926 when his Vol. I, *The Early Railway Age*, 1820–1850, came off the press. Vol. II, *Free Trade and Steel*, 1850–1886, appeared in 1932. Vol. III, the subject of this review, is a 1938 publication. In these three volumes Dr. Clapham has discussed accurately and in detail the economic history of Modern Britain. He has, in fact, set a high standard of excellence, one exceptionally difficult for future historians to equal, much less to surpass.

His last volume has eight meaty chapters and an epilogue, all well documented. Those chapters discuss the industrial state with its neighbors and vicissitudes; agriculture; industrial change; limited liability, joint stock amalgamation, and cooperation; commercial and industrial organization; communication; the economic activities of the state; and life and labor. The volume contains eleven diagrams and a good analytical index.

Although the book is an excellent one, readers may and will find fault. Dr. Clapham at times indulges in statements which seem coarse. He prefers such expressions as "the peasant's belly," (p. 48) and "filling of anyone's belly," (p. 395) to the gentler but

less-easily remembered expression of "stomach." In ridiculing English laws he goes out of his way to use a still stronger word (p. 436). At times, too, sentences appear quite long and involved. Examples of long sentences are rather numerous, but two will suffice (pp. 536, 554).

In making comments on other countries our author is sometimes justly critical, but he is not always absolutely accurate. American ports were not quite "wide open" in 1907 (p. 40). Nor did the United States absorb 3,412,000 people in three years, 1905–1907 (p. 47), for many, often a fourth in prosperous years, returned home. In discussing the losses of insurance companies from the San Francisco earthquake and fire he declares of the British companies: "Not one had failed though many American companies had" (p. 299). A fair comparison would have stated the losses of each group of companies. We likewise read with doubt of an "entirely unshaken United States, always rich, and now, as it seemed, rich beyond all European standards" (p. 527). Should the economic historian prophesy? Our author gives the 1913 coal production of 287,000,000 tons as "no doubt . . . the absolute historical maximum" (p. 167). The book could be better adapted to the use of the general reader and the student by placing the subdivisions of the good table of contents at the appropriate places in the various chapters.

Notwithstanding these restrictions the book as a whole is scholarly and conveys the impression of reserve power and mastery of related subjects. Dr. Clapham does not hesitate to criticize British producers, authorities, or mothers. For example, in referring to the early invasion of German goods, he says: "If they pricked the British producer they did no harm: he was sometimes sleepy" (p. 13). He also states: "The English farmer—it is always of averages that one speaks—was certainly inferior to his Danish, and probably to his Dutch and German, fellow" (p. 114). In discussing the poor law he mentions "a pitiful Parliament, too easy-going since 1890" (p. 412). He ridicules various laws, including "An Act to permit Local Authorities to provide Cleansing and Disinfection for Persons infected with Vermin" (p. 436). He also condemns some mothers quite vigorously: "One cause of in-

fantile mortality in the slums was the drunkenness of mothers; the child was overlain in a drunken sleep" (p. 438).

Dr. Clapham's style is clear, considering the large number of details necessarily used. His references to literature are frequent, his expressions are often thought-provoking, and his comparisons are apt. We read: of "Ruth's Moab," (p. 10); "silvery American Republics," (p. 21); "swingeing fulfilment," (p. 21); "Lancashire's importunate and important sake," (p. 28); "Bradford reports had been lyrical," (p. 31); Kipling's "our pomp of yesterday is one with Nineveh and Tyre," (p. 34); Punch's picture of little Jonathan and his toy ships (pp. 44, 45); "the Act was a blank failure," (p. 106); Hood's "Song of the Shirt," (p. 332); "unprofitable-profitable undertaking," (p. 368); a reference to Icarus, (p. 396); Tennyson's "pilots of the purple twilight," (p. 396); and "even a slight worsening," (p. 464). Dr. Clapham at frequent intervals makes striking statements and comparisons. In discussing the replacement of pasture by crops he says: "In the green West there was no place for them. It merely became greener" (pp. 87, 88). He comments: "Britain was like the thrusting, self-making, nineteenth-century manufacturer who lived hard and let his wife do housework while he put every shilling into the mill. Only Britain's mill was overseas" (p. 476). He conveys the bitterness of the transport workers toward the future Lord Devonport, chairman of the Port of London Authority, by this statement: "At the end of July, after prayer for the striking of Lord Devonport dead had been offered by Ben Tillett on Tower Hill, the strike was called off" (p. 502).

No student interested in economic history can afford to ignore Dr. Clapham's scholarly, well-written, and interesting picture of Britain's industrial life.

University of Kentucky WALTER W. JENNINGS

The Problem of Economic Order. By C. E. Ayers. New York: Farrar & Rinehart, 1938. Pp. vi, 92. Paper covers. 60 cents.

The central theme of this monograph is that the present disorder and confusion in our economic system is due to the failure of mass purchasing power, and this failure in turn is due to the uncon-

trolled accumulation of capital funds. The author is sharply critical of classical economic theory based upon the simple and obvious system of natural order, and believes the failures of classical theory are due to inherent fallacies in its fundamental assumptions.

Starting with a brief survey of the rise of modern machine technology, the author progresses rapidly to a description of the more important features of free enterprise, and then to a critical discussion of the classical theory of prices. Here the author takes such classical terms as "value," "law of supply and demand," "marginal utility," and "factors of production" and points out what he considers to be fundamental errors in the thinking of classical economists,—errors which vitiate the whole classical theory of economic order (p. 39). The decline of competition and the rise of monopoly in the 19th and 20th century are discussed at some length, and the author concludes with some suggestions as to how economic progress and order can be furthered. The principal suggestions for decreasing the extreme inequality in the distribution of income and for increasing mass purchasing power involve governmental action. The author believes that the social security program and progressive income taxation have the effect of increasing the flow of funds into consumptive channels and decreasing capital accumulation, and are therefore, innocently, steps in the right direction of social order.

The primary criticism which this reviewer has of the thesis advanced here concerns the value or usefulness of classical theory in the analysis of present economic problems. The author implies that because classical economic theory has not stood the test of time in terms of its fundamental assumptions, particularly of perfect competition, perfect markets, etc., therefore it has lost most of its usefulness in explaining modern economic phenomena. While we have come a long way from the simple and obvious system of natural order of the classical economists, and while certainly major qualifications and reservations must be made in classical theory to take account of the rise of a machine age and the decline of competition, this does not by any means nullify the usefulness of classical theory in present day economic analysis. Even the students of the newer school of economic thought,

whose efforts have been devoted to making economic theory more realistic by a restatment of it in terms of monopolistic or imperfect competition, do not deny the logical usefulness of classical theory in their analysis.

Despite this weakness, the reader will find this little book stimulating and provocative. The author displays keen analytical ability and a carefully thought out presentation of his case.

North Carolina State College, E. B. McNatt
University of North Carolina

Current Economic Delusions. By E. C. Harwood. Cambridge, Mass.: American Institute for Economic Research, 1938. Pp. 112. $1.00.

The Adventures of Dr. Economist. By Roy Del Ray. Detroit, Mich.: Mark & Jolan Hirschfield, 1938. Pp. 156. $1.00.

The authors of these little books attempt to diagnose what is wrong with the thinking of economists and are concerned with making economics a logical mathematical science. While Mr. Harwood sets out to defend his fellow economists from public disapproval by exploding certain popular fallacies, Mr. Del Ray, at least by inference, consigns all of us to the limbo of psuedo scientists, or witch doctors.

Without excusing chronic faults such as inaccurate definition of terms and inconsistent logic, Mr. Harwood points out that economic science is still in its swaddling clothes and hence an inviting field for crusaders, "crackpots," and selfish interests. To this class of psuedo economists, or economists by newspaper consent, he consigns some of our most popular writers, lecturers, and spellbinders. Of the topics discussed in the several chapters, economists in general will appreciate especially the analysis of the effects of devaluation on prices and the meaning of speculation. At the risk of being classified in the "lunatic fringe," however, this reviewer wishes to point out that there are large numbers of economists who do not share the author's enthusiasm for gold and the competitive system. Nor do they subscribe to his argument concerning the inevitable failure of attempts to manage our monetary and credit system so as to prevent unbalance between savings and investment, or among different groups of prices.

The Adventures of Dr. Economist takes its title from one of the parables used to illustrate the unscientific nature of economics. The author contends that economics must become an exact science, and to do so must discard the terminological paraphernalia already accumulated. In his view this is simply intellectual dross that has so beclouded economic discussions in the past that nothing has been accomplished for the improvement of the economic structure of the world. Unfortunately, the measuring rod recommended by the author to put the science on an exact mathematical base is one which economists have long since discovered, discussed, damned, and discarded. It is human labor! Petty, Ricardo, and Adam Smith are among those who considered such a measure. In fact the author's statement that "the exchange value of every commodity and service is determined by the quantity and quality of labor which has become materialized in it" is remarkably similar to the familiar observation in Book I, Chapter 5 of *The Wealth of Nations.*

University of North Carolina C. H. Donovan

Business and Government. By C. C. Rohlfing, et al. Third edition. Chicago: Foundation Press, 1938. Pp. xviii, 780. $4.00.

Teachers of economics are guilty of betrayal of trust if they graduate young people today taught to believe that the profit system is working pretty much as it did in the nineteenth century. Very brief contact with the business world will convince students that few entrepreneurial decisions can be made at present without first finding out what the state has to say. Books such as the one under review deal with questions of growing importance.

An analysis of the increasing integration of business and government can be approached from either the business or the governmental point of view. The former would probably stress the modifications of the laissez-faire, competitive economy being wrought by increasing government regulation, while the latter approach would probably emphasize the legal and administrative aspects of government control of business. The former is apt to be biased against government "interference" with business while the latter is apt to smother the economic phases of the problem under discussions of court decisions and administrative procedure.

A well-balanced textbook demands that the author be an almost impossible combination of a broadly-trained economist, an experienced, "liberal" business man, and a political scientist with extensive legal training.

The book under review strives to meet these demands by putting four men to work. It succeeds only fairly well. Like most multi-author ventures, this one discloses considerable disparities in point of view and philosophy. In the early chapters constitutional and legal discussions predominate, much of it dry. (Over 330 legal cases are cited throughout the volume.) Later chapters shift the emphasis somewhat toward the economic factors. Here and there the tone resembles that characterizing the speeches at a convention of the Chamber of Commerce; government control of business is a nuisance or worse, to be fought or at best tolerated but never welcomed.

Many of the topics, however, are treated from a broad public viewpoint. Commendable examples are the chapters on housing, farm tenancy, cooperatives, boycotts, and social security. The chapter on Anti-Trust Laws takes no cognizance of the problems of imperfect competition and partial monopoly. The discussion of taxation is more legalistic than economic, as is the treatment of credit and banking. To counterbalance these defects the authors have performed well on the Securities Exchange Act and on the Regulation of Public Utilities Holding Companies.

In the hands of an able teacher it should make a reasonably satisfactory text for a course in government and business.

The Woman's College, ALBERT S. KEISTER
University of North Carolina

Economic Consequences of Recent American Tax Policy. By Gerhard Colm and Fritz Lehmann. New York: Social Research, 1938. Pp. xii, 108. $2.00.

The term "economic consequences" is interpreted for purposes of this monograph to apply exclusively to the effects on the capital market. There is no consideration of direct consequences of the tax policy on other phases of American economy. Moreover, the authors, though careful to call attention to noneconomic considerations, do not attempt any analysis of such factors.

It should be noted too that "American tax policy," for purposes of the analysis, refers to the direct influences of *federal* taxes alone. No consideration is given to the indirect reverberations of federal policy on state and local finances and through them on the general economic life of the community; neither have the authors undertaken an examination of changing state and local revenue policy. In the light of these severe restrictions on the scope of the study (which are nowhere completely stated in the volume itself), it is reasonable to expect at once a degree of clarity unusual in such economic studies and a measure of unreality which abstraction of these particular phases of the subject matter will occasion.

The discussion is divided into three principal parts. The first part undertakes an incisive if brief analysis of the American capital market. Part II essays an examination of the effects on this market of recent federal income, estate, undivided profits, and social security taxes (little or nothing is said of the excises). In Part III, after outlining specifically the findings of the first two parts, some attempt is made to estimate the probable consequences for the capital market of alternative tax policies now open to the national congress. Appendices summarize some of the more important statistical studies on which the body of the monograph is based. There is no index.

The conclusion of the authors regarding the central problem can be briefly summarized. They believe that tax policy since 1930 has been an important short-run influence—among a number of other causal factors—detrimental to capital accumulation. They are convinced, however, that in the long run the rate of savings in the United States will undoubtedly outrun the need for capital in the country even though the present tax policy be continued. Thus, though a significant cause of a capital shortage in the immediate situation, New Deal tax policy may have made some contribution to long-range capital-market equilibrium. The expression of the authors respecting the 1936 situation at one point (p. 71) may be directly quoted. "The fiscal policy increased the difficulties by impeding private investments without stimulating public investments; by increasing consumption when such a stimulus was no longer needed and by accentuating the

fluctuations in the security markets. This is the short-range aspect. In the long run, however, it appears to be true that a tax system with progressive rates of income and inheritance taxes and with some checks on self-financing may contribute to the achievement of a better-balanced economic order."

University of Kentucky JAMES W. MARTIN

American Regionalism. By Howard W. Odum and Harry Estill Moore. New York: Henry Holt & Co., 1938. Pp. x, 693. $3.80.

This is a hefty volume on American regions and their relation to regional planning. The authors view regionalism as "a cultural, historical approach to national unity." As Protestantism and Catholicism have programs for spiritual salvation, so regionalism has for its objective national salvation through "a dynamic doctrine of national development." The authors are social evolutionists. They believe that what a region or a state becomes is the inevitable product of natural processes, environment, and man working together. While the end sought in a study of regions is effective regional planning, they do not consider the plan that evolves as "a panacea" or "an inflexible social arrangement superimposed upon a nation but rather the inevitable product of a natural process which emerges as an organic part of the great totality of a national scheme." They do not tell us just how regionalism will ultimately result in effective national integration. They do say, however, that the motivation will come by making the nation regional conscious instead of sectional minded, by making states less provincial and more regional and national minded, yet at the same time conserving the state and region in the ever-encroaching centralization of power and functions of the federal government. They believe that the linking of all human activities, thoughts, and feelings with the environment of the region will go far in solving the evils associated with human existence today. They list the "general problems" that are "in the way of attaining the ends of a new democracy," such as the unequal distribution of wealth, inequality of opportunity, lack of social security, group conflicts, and others; yet "there is opportunity," they believe, "for new forces [to operate] upon the

regional foundation of both cause and effect, past and future." They agree with Mulford that a sense of regional setting and regional history is essential if we are to have an informed and participating body of citizens who know the art of socialized living.

The volume is divided into three parts. Part I, "The Rise of American Regionalism," discusses the facts of regionalism, its functions, the theoretical study of society, and the practical planning of its future. It considers natural regions, cultural regions, service regions, and tools for regionalism. Part II bears the general title, "Exploring the Regions." In this the authors examine the use each of the social sciences has made or is making of the regional aspects of its phenomena. The authors begin with the philosophy of the geographers regarding regions throughout the ages from Herodotus (whom the authors rightly consider to be a chorographer-geographer, not a historian), Aristotle, and Strabo, on down through the ages to Humboldt, Herbertson, and geographers of the present. The geographers who read this section will find much that is illuminating, for the authors, whose major interest is in the significance of the region, have given far more thought and study to this phase of geography than most geographers who have long written regional studies but have looked upon the region largely as a "frame of reference" in the organization of materials. The authors find that each of the social sciences—anthropology, economics, political science, and sociology—has to a certain extent recognized the regional distribution of phenomena.

In Part III are presented the authors' representative regions of the United States, six in number, namely: the Northeast, the Middle States, the Southeast, the Southwest, the Northwest, and the Far West. In bounding (the regions) the authors do not cut state lines. The result is little more than the subdividing of regions long recognized by the Census Bureau. "Arbitrary standards," presented for delimiting the regions, are as follows: (1) The number of regions must not be too large for practical purposes, yet the regions must be large enough to comprehend the largest number of values: (2) there should be a fair degree of similarity of statistical indices of a socio-economic nature; and (3) a measure of physiographic homogeneity, historical develop-

ment, folk culture and institutions, origin and character of its people, and surface features commonly accepted as characteristics. These are not geographic regions, economic regions or historic regions but regions based on a combination of factors. They are not fixed either as to boundaries or as to number, for undoubtedly the evolution of human society in America will result in continuous rediscovery and reintegration of regions. So far there is little evidence that spontaneously developed regions or societal groups will ever evolve that bear any semblance to the regions delimited in this volume. The New England Council, the Pacific Northwest organization, the Red River association, and others have so far developed because of a pressing need in a region and are concerned with areas that form but a small part of the regions outlined by the authors. In the discussion of the regions of America, the authors have gleaned widely and deeply. Geography, history, sociology, literature, etc., have yielded of their treasures to formulate graphic pictures of each of the regions.

A study of the region is fundamental to regional planning. The authors believe firmly that the way out of the present dilemma in which the nation finds itself is regional planning. A concept of the region as a "dynamic social reality" is the first step. Although they consider the TVA a sample of regional planning of a positive sort, it is apparent that they favor state or regional initiative, for federal activity might endanger genuine regionalism by fomenting sectional antagonisms.

The volume is a valuable contribution to the literature of regions and regional planning. It is comprehensive, well written, well organized, and represents a huge amount of hard, conscientious work in a field in which the authors have deep interest and in which they have long been making outstanding contributions.

George Peabody College for Teachers A. E. PARKINS

The Future of the Paper Industry in the Southeastern United States and the Effects on Stumpage Values. By the American Institute for Economic Research, Cambridge, Mass., 1938. Pp. 108. $3.50.

The phenomenal expansion of the pulp and paper industry in the South during the past four years makes any study in this field of special interest. Predictions on the development of this

industry have varied from pessimistic forecasts of the destruction of the Southern forests to optimistic forecasts of the replacement of cotton by "tree-farming" and realization of that mythical balanced industrialization of the South. The American Institute for Economic Research, therefore, undertook an ambitious program in attempting to forecast the future of the paper industry in the South, and particularly to forecast the effects of such development on stumpage values.

The report contains information on the pulp and paper industry both in the United States and abroad; it gives generalized data on the lumber industry, the rayon industry, and the "status of world forests;" but it does not adequately interpret the relationship between such facts and the Southern paper industry. Major attention, for instance, is given to the world newsprint industry. In view of the fact that no mill in the South produces commercial newsprint at the present time, such information, while interesting in itself, leaves the reader wondering why it is included.

On the other hand, the report largely ignores the kraft industry. Mills using the sulphate or kraft process account for more than than three-fourths of the pulp and paper production in the southeast. Wrapping paper, boxes, and boards are the main products. The reader is again left wondering, after rereading the title, why the future of this industry is not considered in greater detail.

The conclusion of the authors that the price of pulpwood stumpage in the southeast will rise seems to be sound. One assumes that this means pine stumpage exclusively, as hardwood stumpage, normally more expensive to pulp mills than pine, is not considered. The predicted future price of $6.00 per standard cord (pulpwood is normally purchased by Units, comprising one and one-fourth standard cords) f. o. b. mill is of necessity generalized. No prediction is made as to the effect of prospective competition between Southern sawmills and Southern pulp mills for wood in specific localities. An extremely doubtful assumption, however, is that the harvesting of pulpwood is not subject to the principle of increasing costs but rather to constant costs. In all probability stumpage values of pulpwood will continue to vary in different areas of the southeast.

The authors of this report assume a uniformity in the paper

industry that is hardly true. The suitability of woodpulp for specific products depends upon the process used in manufacture and the species of wood used. Actually the industry in the southeastern United States is specialized.

A reader of the report will learn much about the world newsprint industry, and perhaps be charmed by the suggestion that pine trees be planted among corn rows or that Africa has 798,000,000 acres of forest area. The exact connection between such data and the southeast may not appear altogether clear, but the reader will be left with the general impression that the future of the industry in the South is bright—an impression that in all probability will materialize.

United States Forest Service, W. T. Hicks
Asheville, N. C.

International Control in the Non-Ferrous Metals. By William Yandell Elliott, Elizabeth S. May, J. W. F. Rowe, Alex Skelton, and Donald H. Wallace. New York: Macmillan Co., 1937. Pp. xxi, 801. $7.50.

Like its more modest companion volume by Brooks Emeny on *The Strategy of Raw Materials,* this highly significant and much needed research study was sponsored by the Bureau of International Research of Harvard University and Radcliffe College. The book is divided into two parts, very different in both size and contents. In Part I, which makes up less than one-seventh of the volume, the general background is presented. In an introductory chapter W. Y. Elliott, Professor of Government at Harvard University, points out the general significance of international economic control and explains why the non-ferrous metals—nickel, aluminum, tin, copper, lead, and zinc—were selected for special research. In a second chapter Professor Elliott examines the political implications of international price and production control. Economic aspects of these control schemes are analyzed by W. J. F. Rowe, Professor of Economics at Cambridge University. Professor Rowe, in the course of his discussion, points out that, as he advances in his study of international price control, he finds it necessary to shift his position from that taken in previous writings, especially in his introductory article in *The Economic Journal* of September,

1930. In general, this shift involves a retreat from a more orthodox laissez-faire position to one more fully appreciative of the implications of imperfect competition and more tolerant of control. Mr. Alex Skelton, Economist of the Royal Bank of Canada, who incidentally contributed over half of the entire volume, closes this part with a brief chapter on The Mechanics of International Cartels.

Part II, which covers the remaining 650 pages of the volume, consists of a series of monographs written by specialists. Mr. Skelton contributed the general chapters on nickel, copper, lead, and zinc, altogether 320 pages of text and 108 pages of statistical tables and graphs. Professor Elizabeth S. May of Goucher College wrote the section on International Tin Control to which is added as an appendix a Congressional Committee Report on the international tin situation. Professor May also contributed the chapters on the copper, lead, and zinc industries of the United States. Professor Donald H. Wallace of the Economics Department of Harvard University, whose more complete study of the industry has since been published in book form, contributed the section on aluminum.

A striking feature of this volume is the care with which an enormous wealth of material—technological, historical, economic, and political—was organized. Not all the writers have prefaced their chapters with as complete an outline as that found in Professor Elliott's chapter on Political Implications, but all chapters are organized so admirably that the reader never gets lost in the superabundance of factual material and analytical discourse.

The economist who wishes to keep abreast of vital developments in the field of international economics can hardly afford to ignore this volume, with its rich supply of illustrative material, especially on situations involving imperfect competition of various types and degrees. Few books can serve better as an antidote to empiricism. The economic historian likewise will welcome this volume, for it fills wide gaps in recent economic history, gaps which the private scholar unaided by institutional support could hardly have found possible to fill.

The striking merits of this volume might perhaps have been further enhanced if wider attention had been given to European

literature. The systematic perusal of European studies might, in the first place, have thrown additional light on some rather intricate European problems, and, in the second place, have tempered slightly the attitude toward the poorer nations—unfortunate stepchildren of nature and history. Whether or not this in turn would have added to or detracted from the general merits of this work is an open question.

Since most of the manuscripts were closed in 1935—a chart showing aluminum production of American and European companies ends even with 1929—it is to be hoped that ways and means may be found to keep this valuable study up-to-date. A book of such unusual worth should not be allowed to grow obsolete.

University of North Carolina ERICH W. ZIMMERMANN

Danish Agriculture: Its Economic Development. By Einar Jensen. Copenhagen: J. H. Schultz Forlag, 1937. Pp. xvi, 417. $3.75.

Denmark, the subject of Mr. Jensen's excellent book, has been, in many respects, a most fortunate country. The idea of *Grandeur*, which took possession of many European countries was abandoned, forcibly, perhaps, by Denmark prior to the beginning of the 17th century. Indeed, after 1660, as Mr. Jensen points out, Denmark as a world power ceased to exist. Another thing of equal significance in the history of Denmark is that this country does not possess in large quantities natural resources, at least not in sufficient volume to attract the attention of other European powers. As a result of the absence of natural resources, Denmark has not been the object of invasion by her less civilized and warlike neighbors. These two things, the abandonment of the idea of empire and the freedom from invasion, left Denmark free to attack her economic and social problems. This she has done with remarkable success. Although she does not participate in destructive and aggressive wars or sit at the Peace Table and determine the destiny of nations, she has nevertheless set an example in social and economic reform which other nations might do well to emulate. And it can be said with few qualifications that Denmark today is the most civilized of the European nations. It is a country in which culture, in its true sense, is most widely diffused.

Mr. Jensen's book treats only one segment of the life of the

Danes; namely, its agriculture. In this field it is the most significant piece of work which has appeared in a generation. Beginning with the political and economic survey of Denmark, Mr. Jensen holds the reader's attention through such subjects as The Natural Basis of Danish Agriculture, The People and Their Social Background, Land Tenure, Industry and Commercial Policy, The Technical Basis of the Agricultural Revolution, Effects of Monetary and Technological Influences and of Tariffs, and Cooperation in Danish Agriculture. Mr. Jensen's book is not simply a narrative report, it gives the social and economic philosophy which has guided the Danish people in their attempt to solve the social and economic problems of agriculture. There is also some nice economic theorizing, particularly with respect to the forces which effect changes in agricultural prices which should be of interest to all students of prices and monetary problems. The author is not content with simply stating what Denmark has done, but surveys the future and comes to the general conclusion that the outlook of the Danish farmer is bright, although the action of other countries, particularly with respect to enforcement of high tariffs, may have serious and blighting effect on the welfare of the Danish people.

North Carolina State College, G. W. FORSTER
University of North Carolina

The Science of Production Organization. By E. H. Anderson and G. T. Schwenning. New York: John Wiley & Sons; London: Chapman & Hall, 1938. Pp. x, 282. $3.50.

The conduct of an enterprise requires that many complementary dynamic factors be brought into a systematic whole. Organization is the function of designing such a system. It is one of the tools of administration, of which management, or execution, is the other. Because it is concerned with design, organization may be scientific and creative.

An enterprise is not merely *an* organization; it is several integrated organizations. That sector concerned with entrepreneural activities is the business organization; that sector concerned with coordination of impersonal technical factors is process organization; that sector concerned with control of processes, with bringing

human activity into relationship with impersonal factors, is productive organization. It is with this latter field that this study is concerned.

In making the study the authors aimed merely to synthesize material, much of it contradictory and confusing, contributed by many students of the subject. Their synthesis is itself a notable contribution, for it interprets and enriches all that preceded it.

Aside from its substantial content this study has characteristics that make it unusually interesting. Nominally concerned with a single phase of internal administration, it assembles around that interest a fairly comprehensive treatise on administration. Its documentation covers the entire literature of "management." In the use of quotations it is bold and novel; sources are not merely referred to but are actually quoted at the rate of about three to the page. Some of these quotations are woven into the text and some are blocked. This technique is handled with such success that unity and flow are not sacrificed. It will leave many a young student with the impression of having not merely heard of but shaken hands with all the leading authorities. Altogether it is an informing and stimulating book for any executive, and in the hands of a live and informed teacher may prove to be the most suitable available text on which to pivot an advanced course in management.

Of course organization is not all there is to administration and management, but all there is in administration and management has a bearing on organization. This determines the scope of the study. As a whole it is an expression of the philosophy and technique of scientific management. The first chapter is on definitions and interprets for subsequent use such fundamental concepts as science, administration, organization and management. The second chapter is an elementary but suggestive discussion of the relationship of economics and scientific management. It gives Frederick W. Taylor, who was an engineer and not an economist, a place in the hierarchy of geniuses beginning with Adam Smith who have conditioned the development of the theory of economics. Then follows a succession of chapters which discuss the organization of work, organization structure, types of organization (line, line-staff, functional, committee), advantages and disadvantages

of the several types, and basic principles of organization. The final chapter discusses briefly the problems presented by the concept of applying the principles and methods of organization as developed in the study to integrated enterprises and rationalized industries.

The fundamental thesis of the authors is that the particular organization for a particular production situation cannot be determined a priori; that its nature must be determined by analysis of the factors characterizing the particular situation. One must start with clear understanding of the purpose to be achieved. Determination of the technical activities essential to achievement follows. These technical activities are then analyzed into their ultimate units of effort. These are assembled in groups according to their relationships; these groups in turn are assembled in accordance with their relationships, and thus an organization is built up—an organization which fits the particular situation. It may be line, line-staff, functional, or a hybrid among these. The particular situation, the purpose to be achieved, the technical activities essential to achievement—these are the controlling factors which determine the organization type for the situation. These matters are not discussed without critical references to points of view presented throughout existing management literature.

This is a pioneering work of its type, and experience with its use will reveal parts which may call for improvement. The authors appear to be too much fascinated by, and place too much reliance on, that indefinite concept, the Gilbrethian therblig. Some such concept as "work unit," because more understandable and manageable, might carry more conviction. Although guided by a comprehension of scientific management which is more consistently sound than that of any other study of the textbook type, the authors are led by secondary authorities into occasional errors, particularly with respect to the attitude of scientific management towards labor. A number of the references, while to original sources, are to reprints of these sources and do not give proper credit to the auspices under which they originally appeared. The bibliography is extensive and valuable; the index thorough and helpful.

New York, N. Y. H. S. Person

Executive Salaries and Bonus Plans. By John C. Baker. New York: McGraw-Hill Book Co., 1938. Pp. xxiv, 274. $3.50.

A book of significance is a delightful discovery in an age when we are overwhelmed by things to read.

The coming to maturity of the corporate form of organization and the separation of the management function from ownership has placed a premium upon managerial talent. This book deals primarily with the question as to how much management is paid for its services, but it also treats of the methods by which it is paid. A subordinate question raised at the very beginning of the book is whether executive employment fluctuated with boom and depression. The evidence submitted on this particular is not convincing because the salary data apply to the executives at the top of the pyramid who would be the least likely to change in number. In any case the salary lists sent to the government are not a reliable measure of the number of management jobs. Executive turnover lurks, not among the higher-ups, but among their juniors.

It was found that executive compensation declined 40 per cent between 1929 and 1932, but it proved less flexible than corporate income which, in the case of 100 industrial companies, fell 99.5 per cent. This flexibility of earnings resulted from the shrinkage in bonuses rather than in salaries, which declined only 10 per cent. Among these companies, the flexible method of payment through the use of bonuses was general at the end of the 1920's, as is indicated by the fact that 62 to 64 per cent of the companies used it in the balmy years 1928 and 1929.

How much does top management cost? The answer depends upon company size. For those with assets below $30,000,000, the percentage of earnings paid to executives was 9.7; for larger ones, 4.1. The median percentage for the group of 100 industrial companies was 6.6. Those with lower percentages were the more profitable enterprises. This group of earnings quite naturally remained more stable as general business declined between 1929 and 1932, but the author curiously ascribes this result to the amount of compensation paid. The heading of this paragraph is "Effect of Executive Compensation on Earnings." However, the concluding part of this chapter states "there is no substantial

statistical evidence to show that directors of corporations either increase or decrease earnings by paying executives a higher proportion of compensation to earnings."

These are but a few of the host of questions raised in this intriguing and valuable study. A mere listing of its chapter headings indicates the breadth of its scope. One relates to executive compensation in retail companies between 1926 and 1938. On the average, only 1 per cent of the consumer dollars spent in department stores went to executives and only 0.3 per cent in chain stores. Of the 38 firms studied, 23 had incentive arrangements. Another chapter relates to investment companies. Still another, and one of the most interesting, presents an analysis of compensation among steel companies from 1928 to 1936. The percentage of sales income paid out by small steel companies was higher than among larger ones, and this tendency was paralleled by the percentages of compensation to earnings. Among the small steel enterprises, the percentage was 10.5; whereas among the large ones it was 4.2. Their shareholders received, on the average, five times as much as top management.

The author closes the chapter on method by raising some doubt as to the applicability of the incentive idea to executive work. He suggests that the character of the work they do is immeasurable, and that they work hardest when profits are least plentiful.

However valid his criticism of executive incentives may be, there seems to be no evidence presented to prove that the payment of executives according to results is not of advantage to shareholders and to consumers. No one disputes the fact that executive performance cannot be measured except crudely, but these top executives occupy positions of such supreme importance to their companies and to those dependent on them that any device which stimulates their initiative is worthwhile.

As we indicated at the outset, the great contribution of this book is an analysis of the prices paid for this particular variety of human labor—top management. But as a study of prices, it is unavoidably weak in its definition of the kind and quality of management talent for which the compensation is paid. This is a weakness that the author was, of course, powerless to remedy.

All in all, John Baker's careful and discriminating contribution is an invaluable addition to the literature of management and economics.

University of Pennsylvania C. Canby Balderston

Managerial Control. By John G. Glover and Coleman L. Maze. New York: Ronald Press Co., 1937. Pp. 574. $4.50.

The title of this book would be somewhat more indicative of its content were the word "cost" inserted somewhere, as for example, "Managerial Cost Control." The treatise deals primarily with cost or expense and its control, and incidentally only with other phases of managerial control such as production control, labor or personnel control, inventory or stores control, etc.

Preliminary to the treatment of cost control the authors first describe briefly the general operating system and the organization of the managerial unit. This unit is the conventional large manufacturing enterprise marketing its own product. Attention is next given to the tools, methods or instrumentalities of cost control. These include chiefly the following: research, standards, records, budgets, reports, and cost methods and systems. Attention is given also to depreciation, wage systems, methods of expense distribution and to the relation of engineering and production control to the control of cost.

The second part of the book consists of a detailed treatment of the elements of cost classified according to the main functions or departments of the enterprise, which are: materials, labor, power, maintenance, inspection, tools, material handling, and factory administration which includes an excellent though brief treatment of the cost of idleness. The third part continues the discussion with respect to: traffic, marketing, advertising, and general administration. Finally, accounting and cost accounting procedure are briefly described.

The method of procedure consists chiefly in analyzing and examining each of the many elements or items of cost that may be found throughout the various ramifications of industrial activity. An attempt is made also to analyze the factors tending to cause higher cost or to lessen or eliminate cost. The accounting pro-

cedure is followed throughout in classifying, recording, and interpreting the various elements of cost. Many illustrations of records used in accumulating cost information amplify the text. As a whole the treatise is mainly descriptive in nature; it does not go deeply into controversial problems, nor into matters of economic theory or social policy.

In a book of this type the authors have produced a most useful volume. It should be of service to students of business management in that it presents a description of the thousands of items of cost that go to make up the total cost of production. It should be useful to students of cost accounting as a book of parallel reading since it discusses the origin or sources of cost and the methods of cost reduction and control. Due to the great amount of information which this volume contains, it should be useful as a reference book for both students and business executives. To the layman or general reader, however, the volume may not prove interesting due to its constant cataloging of details. The economist also may find it too much involved in the minutiae of cost control to contribute directly to the general economic problems of cost as they are usually treated in this field.

University of North Carolina E. H. Anderson

STATE NEWS

ALABAMA

The recession in business activity which characterized the latter part of 1937 and the first part of 1938 seems to have reached its lowest point in June, 1938. The index of industrial activity in Alabama computed by the Bureau of Business Research dropped to 36.9 per cent below calculated normal in that month. The months of July, August and September showed rather decided improvement. The index stood at 13.0 per cent below normal in September. The individual series included in the index in general followed very much the same course. The lines which showed the greatest degree of curtailment were coal, coke and pig iron. On the other hand, electric energy showed increases in each of the months from May to September, this being the only consistent exception to the general tendency during the first part of the year. Improvements in the cotton textile industry seem to have been postponed somewhat longer than in the other important industries of the state since the figures for cotton consumption continued to decrease until August.

In general all of the industrial activity indices remained decidedly below the positions held by those same series during the same month of 1937. The improvements in July, August and September tended to bring conditions more in line with the record of the previous year, but even then the only series which exceeded its 1937 record was electric energy sales which reached a point 1.5 per cent above its September, 1937 record. The extent to which the other series remained below the previous year's position is indicated by the following percentages representing conditions in September as compared with the same month of last year: cotton spindle activity −6.6 per cent, cotton consumption −7.6 per cent, pig iron production −11.5 per cent, coke production −25.0 per cent, steel ingot production −24.2 per cent and coal production −25.8 per cent.

While complete information is not available for the months of October and November, it seems quite clear that tendencies of the preceding three months have continued.

In other lines of business activity conditions seem to parallel quite clearly the course taken by the industrial series. The most important exception appears in the reports of building contracts. In general, heavy increases occurred during each of the months from May to September. These increases carried August and September very decidedly above the same months of the preceding year. In square feet of floor space, building contracts in August exceeded the same month of 1937 by 156.6 per cent and in September by 120.2 per cent. In the case of value of building contracts awarded, August exceeded the same month of 1937 by 88.5 per cent and September surpassed the same month of the preceding year by 322.1 per cent. This condition in the construction industry undoubtedly is due to the government policy of encouraging building through its public work programs.

In the trade series the most conspicuous departure from the general tendencies appears in automobile sales. In place of improving in August and September quite decided decreases took place with the result that sales remained more than 50 per cent below the same month of the preceding year for each of the months from May through September. Recent reports indicate a decided quickening in demand for automobiles. It is very likely that the improvement is due to special conditions in the industry. The relatively low position of automobile sales was not accompanied by a corresponding curtailment in gasoline sales, for reports in that line indicate that consumption in the state fell no more than 4 per cent below the same month of the previous year and in August and September exceeded slightly the record of the previous year. Retail sales for approximately 300 independent stores as reported by the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce, fell below the previous years record in each of the months from May through September. The percentages ranged from 19.7 per cent in May to 16.5 per cent in September.

Plans have been completed for an addition to the commerce building at the University of Alabama. This addition is designed

particularly to provide quarters for the Bureau of Business Research and new stack room space for the business library of the school. It is expected that the contract for the construction will be let some time during the latter part of November.

University of Alabama H. H. Chapman

GEORGIA

With four months of the current fiscal year behind, indications point to a serious deficit in state revenues. Budget officials recently estimated that payments into the general fund would be $12,000,000 for the year, $9,000,000 less than the general appropriation bill for the same period. Payments on appropriations from the general fund, accordingly, will have to be cut even below the 65 per cent now being paid. Although $12,270,965 was collected during the first four months of the current period, only $3,627,865 was for payment on the general appropriation bill. The balance was for payment of accounts to which certain collections are specifically allocated by law.

Failure of revenues to measure up to budgeted expenditures is said to be due in large part to a loss of $3,288,000 from property tax exemptions and failure of the liquor taxes to yield the estimated return. Among the remedies proposed for consideration of the legislature which meets in January is the establishment of a system of state-owned liquor stores. An important element in the present enlarged appropriation bill is the $1,350,000 required for each of the seven months of public school operation which the state is pledged to maintain.

The counties, as well as the state, are still handicapped by the loss of revenue due to homestead and personal property tax exemptions. In the 39 counties voting wet, out of the 48 where referenda have been held, some relief is provided by liquor taxes but this applies to only 25 per cent of the counties. This problem is but one more of the many which will confront the next legislature.

Regional officials of the PWA have recently made public some interesting figures on projects begun and completed in Georgia since the creation of the agency in 1933. In all 247 projects have been completed, 82 others are under construction, and 199 more

have received federal approval. Sixteen of the projects under construction received approval prior to enactment of the new program by Congress last June, the balance as well as the 199 not yet started were approved subsequently. Prior to the new program, PWA granted $7,602,695 and loaned $2,997,834 more. Sponsors put up $8,200,000 in addition, bringing total cost to $18,714,446. Under the new program total costs will be $16,764,416. Applications pending would bring this figure to over $60,000,000. Of the southeastern states, applications from only Florida and Mississippi involve higher project costs.

The federal wage-hour law went into effect in Georgia with apparently little immediate disturbance except in two industries: lumbering and pecan shelling. In these two cases there were reports of widespread shut-downs but whether these were actually the result of the law or would have occurred anyway is yet to be determined. Any general prediction as to the effect of the law would be hazardous at this time.

Emory University J. Edward Hedges

KENTUCKY

A recent significant decision of the United States District Court of the Eastern District of Kentucky upheld the constitutionality of the state Alcoholic Beverage Control Law (*Ziffern, Inc. vs. James W. Martin, etc., et al.*, October 15, 1938). In a suit brought to enjoin the enforcement of the act, the plaintiff claimed that such control of the transportation of liquor was unconstitutional under the "commerce," "due process" and "equal protection" clauses. The action failed since the court held the act to be a reasonable exercise of the police power of the state. "The basis of the police power," the decision states, "lies in the constitution which regards the public welfare, safety and health of the citizens of that state. However, a close examination of the authorities will show that whenever there is a conflict between police power and the constitution the courts will construe the constitution to fit in with the police regulations if at all reasonable." The right of a state to control the production, sale, importation and intrastate transportation of liquor under the police power was already established, and this case, if upheld on appeal, seems to extend that right to the exportation of beverages from the state.

The dates for the second annual Kentucky Bankers' Conference, sponsored jointly by the University of Kentucky, the Kentucky Bankers' Association, and the State Division of Banking, have been set as July 18, 19 and 20, 1939.

University of Kentucky CECIL C. CARPENTER

LOUISIANA

Southeastern Louisiana College at Hammond has set up and put in operation a four year commerce curriculum. The three departments are business administration, commercial teacher training, and secretarial science. In these departments economics courses are given, including public utilities, money and banking, marketing and general economics.

Loyola University of New Orleans has recently added a course to prepare insurance men for examinations given by the Certified Life Underwriters.

The College of Commerce at Louisiana State University will soon be housed in a new commerce building. Construction began November 1, and the building when completed will cost $380,000.

The Department of Economics at Louisiana State University has been greatly strengthened recently through the acquisition of the complete private library of Dr. Richard T. Ely. Next to the Seligman library, recently donated to Columbia University, the Ely library is the finest private library in economics in the United States. It is composed of 7,500 books, many of which are rare classics and first editions. In addition there are complete files of important economic journals, together with numerous important documents and manuscripts.

The Louisiana Bankers' Educational Conference will be held on the L. S. U. campus, January 25-26-27. This will be the second of such conferences, and Dean Trant is making arrangements for the conference.

Louisiana State University S. A. CALDWELL

MISSISSIPPI

The effect of the federal wage-hour legislation on Mississippi is worthy of special note, in view of the fact that the state ranks at or near the bottom of the South as well as the nation in a number

of well known statistical series indicating per capita wealth, income, wages, etc.

Reports to the Unemployment Compensation Commission give evidence of the serious consequences which might have been expected by the state's industries from a law giving wages a floor of 25 cents, and hours a ceiling of 44. In the first year of its operation this commission collected reports on hours as well as wages, by pay roll periods. A study of a large sample list of reports for the first week in December, 1936 yielded the following results.

Sawmills and planing mills, which hire more workers than any other industry in the state, had average weekly hours of 47.7 and average hourly wages of 19.9 cents. Garment factories had average hours of 45.1 and average wages of 22.4 cents. Cottonseed oil mills (which get special treatment with respect to hours on account of their seasonal nature) had average hours of 57.9 and average wages of 17.9 cents.

Some measure of the wage-hour legislation's actual effect is observable in the number of initial claims received by the Unemployment Compensation Commission before and after the regulations took effect October 24. Such claims, in the weeks beginning on the days indicated, were as follows: Sept. 26, 931; Oct. 3, 1,118; Oct. 10, 1,164; Oct. 17, 1,424; Oct. 24, 2,291; Oct. 31, 1,868; Nov. 7, 1,861. During the same period the placements made by the State Employment Service went into a sharp decline.

The interpretation of this increase in unemployment is complicated by various factors, including a let-up in the road building program and a seasonal down-turn in some industries resulting from the short cotton crop. Much of the credit is being generally attributed to the wage-hour regulations, however, and this point of view is supported by the fact that in the week of October 24 a total of 695 initial claims were received from sawmill and planing mill workers alone.

Jackson, Mississippi M. K. Horne, Jr.

NORTH CAROLINA

The North Carolina Unemployment Compensation Reserve Fund stood at slightly over $10,000,000 in October. This is approxi-

mately the size of the fund when payments began. More than $7,500,000 have been paid out in benefits.

During the month of August, North Carolina ranked fourth in the nation in number of total placements through the state employment service. During the past fiscal year 2,900,000 placements were made by public employment offices in the United States as follows: 56 per cent of the total for the U. S. were in regular employment; 62.5 per cent of the total for N. C. were in regular employment; 10.2 per cent of the total for the U. S. were in manufacturing; 11.3 per cent of the total for N. C. were in manufacturing; 14.6 per cent of the total for the U. S. were in agriculture; 5.8 per cent of the total for N. C. were in agriculture; 71.4 per cent of the total for the U. S. were men; 69.6 per cent of the total for N. C. were men.

Duke University is celebrating its centennial during this academic year. Founded in 1838–9 as Union Institute, a joint venture of Methodists and Quakers, it later became a Methodist institution, Trinity College, and in 1924, Duke University. The program began in October, 1938 with a symposium on medical problems. An economics symposium was held in November, 1938; one on law in modern society in December, 1938; and a fourth on women and contemporary civilization will be held in March, 1939. The celebration will culminate in a formal anniversary program on April 21–23, 1939.

The economics symposium in November was arranged by a committee headed by Professor Calvin B. Hoover, having as its theme—"The Changing Economic Base of the South." Among the outstanding speakers were Dr. Paul Van Zeeland, former Premier of Belgium, and Secretary of Agriculture Henry A. Wallace. Among the topics considered either at general sessions or round tables were "The Potentialities of International Trade for the Economy of the South," "Factors Affecting the Future Development of the Cotton Textile Industry," "Possibilities for the Expansion of the Chemical Industry in the South," "Potentialities of Forest Products Industries in the South," and "Problems of Financing Industry in the South."

Duke University J. M. Keech

TENNESSEE

If Governor Browning's refinancing program for the state is carried out according to plans, the state treasurer estimates that the state debt will be reduced by approximately 25 million at the end of next year, leaving the debt at approximately $117,000,000.

It is estimated that there will be approximately four times as many customers using TVA power at the end of the present year as at the beginning. The purchase by the City of Knoxville and the TVA of the Tennessee Public Service Company properties has been a large factor in this increase in number of customers. Memphis, one of the largest cities of the South, has reached an agreement to buy the Memphis Power and Light Company facilities. Some 28 communities in upper west Tennessee have completed an agreement to purchase the electric properties of the Kentucky-Tennessee Power Company.

Tennessee's 1937 production of all types of tobacco was exceeded only by North Carolina and Kentucky, thus placing the state in third place as compared with the 1936 record of fifth place in tobacco production.

The University of Chattanooga has announced the construction of a $300,000 combined university and city public library, to be located on the university campus.

Tennessee Valley Authority T. L. Howard

VIRGINIA

In the October issue of *The Commonwealth*, monthly publication of the Virginia State Chamber of Commerce, there appeared an article entitled "Virginia's Place in the President's Challenge to the South." This interesting article was written by Dr. W. E. Garnett and Charles G. Burr of the Virginia Polytechnic Institute. By means of statistical tables the authors show the rating of Virginia in various significant factors as compared to the entire country and to the Southern states.

The statistics show that Virginia's manufactured products outrank in value all of the Southern states except one; in mineral products all except four; in the fishing industry it stands first. It also stands at the top of the list in bank resources per capita; also

in per capita property holdings and income. In the list of items in the table Virginia has a better rating than the average for the Southern states forty-three times out of fifty-nine.

The authors believe that Virginia makes a better showing than the other Southern states because: "Virginia does not have such a large percentage of sandy soil as many of the other Southern states; hence there is more grass and not quite so much erosion. Only eleven of Virginia's 100 counties grow cotton, and only thirty-eight grow significant amounts of tobacco. The share-cropping system is not so common as in some other parts of the South. Neither is absentee ownership. Nor is the tenancy rate, except in a few counties, quite so high. Furthermore, Virginia has a smaller percentage of Negroes than any of the other Southern states except five. Likewise, it is more self-sustaining in home-grown foods, and has a better standing in most important items in living standards."

Despite Virginia's high rank among Southern states, the story is quite different when compared with the rest of the country. "In count after count of factors of the greatest importance to state well-being, Virginia ranks from thirtieth to fortieth in the nation." In forty-seven of the fifty-nine items given in the table Virginia makes a poorer showing than the national average.

The authors state that, "We should not be too boastful, however, of the fact that we make a better showing than the other Southern states. Rather, we should diligently seek the reasons why we make a poor showing in comparison with the country as a whole, why we stand at such a low level in so many important items." Some of the most important problems which should be studied and a remedy sought are listed as: 1. Human Erosion; 2. Soil Erosion and Poor Land; 3. Siphoning of wealth from the State through Absentee Ownership; 4. Need of Increased Incomes; 5. Youth Adjustment; 6. Educational Needs; and 7. A Greater Sense of Responsibility for the Commonweal.

University of Virginia GEORGE T. STARNES

PERSONNEL NOTES

W. M. Adamson, statistician of the Bureau of Business Research of the University of Alabama, has been granted a year's leave of absence for graduate work at Columbia University.

Roscoe Arant, formerly of Iowa State Teachers College, was appointed at the beginning of the present session an associate professor of economics at the University of Mississippi.

J. Cullen Barton has been appointed instructor in commerce in the School of Commerce of the University of Alabama.

B. P. Beckwith, formerly of Queens College, New York City, has joined the faculty of the University of Georgia School of Commerce as assistant professor of economics.

Horace B. Brown, Jr., has been promoted to the rank of associate professor of economics at the University of Mississippi.

Lelah Brownfield, professor of secretarial science, Alabama College, was elected first vice-president of the Business Education Section of the National Education Association.

Malcolm H. Bryan, vice-president of the Federal Reserve Bank in Atlanta, was elected vice-president in charge of research of the Southern Economic Association for 1939 at the Birmingham annual meeting last October.

Everett J. Burtt, Jr., formerly a graduate student at Duke University, has been added to its instructional staff by that institution.

A. Stuart Campbell of the University of Florida has accepted appointment as economic consultant of the United States Maritime Commission. His primary task will be that of making a survey of the ocean transportation facilities in the Southeast.

James E. Chace has returned to his position at the University of Florida after a year of graduate study at the University of Chicago in the field of labor and personnel. He will also serve as special representative of the U. S. Employment Service for the state of Florida. Among his duties will be that of conducting merit examinations to establish eligible lists from which employees of the State Employment Service will be chosen.

J. M. Charlton, Jr., replaces Raleigh Cutrer, resigned, as instructor in commerce in the School of Commerce at the University of Alabama.

Elwood Dille, formerly of State Teachers College, Tempe, Arizona, has been appointed associate professor of marketing and transportation at the University of Tennessee.

Frank T. de Vyver, professor of economics at Duke University, has been appointed state supervisor of merit examinations for the North Carolina State Unemployment Compensation Division.

E. J. Eberling of Vanderbilt University has been appointed a member of the Technical Committee of the Interstate Conference of Unemployment Compensation Administrators. This committee recently revised the statistical reporting requirements of the Social Security Board relating to unemployment compensation.

Roland B. Eutsler of the University of Florida has been named technical consultant for the WPA Florida Tourist Survey.

J. Wesley Fly has received an appointment as instructor of accounting at the University of Florida.

Bruce Futhey replaces W. Howard Mann, resigned, as instructor of accounting at the University of Alabama.

S. Paul Garner, professor of accounting at Mississippi State College, is on leave of absence at the University of Texas, where he holds a teaching fellowship.

Edward Garrison of the Ohio State University has been appointed instructor in economics at the University of Tennessee.

J. B. Giles, of the University of Texas, is teaching temporarily in the Department of Economics at Mississippi State College.

J. D. Goeltz, instructor in economics at the University of Tennessee, has been granted a leave of absence to continue his graduate work at Columbia University.

John H. Goff, professor of economics, Alabama Polytechnic Institute, is on leave of absence to work with the Tennessee Valley Authority as chief transportation economist. His place is being filled by T. L. Morrison, formerly an instructor at the University of Texas.

J. O. Gragg, formerly of the University of Texas, has been added to the Department of Economics in the University of Louisville as associate professor.

R. M. Havens is an instructor in accounting at Duke University this year. Last year he was on the faculty of the North Dakota State Teachers College.

L. T. Hawley has been appointed acting statistician of the Bureau of Business Research of the University of Alabama after a year of absence during which he acted as director of information and research for the Alabama Unemployment Compensation Commission.

J. Edward Hedges, assistant professor of economics at Emory University, is state director of a real property survey being conducted by the WPA in a number of cities in Georgia under the joint sponsorship of the State Planning Board and local housing authorities.

Wilson Heflin has been appointed instructor in business English in the School of Commerce, University of Alabama.

D. Clark Hyde, professor of economics in the University of Virginia, was re-elected secretary-treasurer of the Southern Economic Association for 1939 at the annual meeting last October.

L. R. Jeanblanc has been appointed associate professor of business law in the School of Commerce, University of Alabama.

Marshall D. Ketchum, formerly assistant professor of economics at Utah State College, has accepted a position as assistant professor of economics at the University of Kentucky.

Chester H. Knight, associate professor of accounting, School of Commerce, University of Alabama, has been elected secretary of the Alabama Society of Certified Public Accountants.

A. J. Lawrence, associate professor of commerce in the College of Commerce, University of Kentucky, has been granted a leave of absence for the academic year 1939–40 to do graduate work.

Charles Lewis, instructor in economics at the University of Tennessee, has been granted a leave of absence to continue his graduate work at the University of Pennsylvania.

Louis W. Lohr, professor of economics in Howard College, was elected vice-president in charge of membership of the Southern Economic Association at its annual meeting in Birmingham for 1939.

Harlan L. McCracken, head of the Department of Economics at Louisiana State University, was re-elected editor of the Southern

Economic Association for 1939 at the annual meeting held in Birmingham in October.

Bertie McGee, associate professor of secretarial science, Alabama College, is on a year's leave of absence for graduate work at the University of North Carolina.

Mildred Mell, formerly dean at Shorter College, this year replaces J. M. Wright in the Department of Economics at Agnes Scott College.

Burton R. Morley has returned to his regular duties as professor of economics in the School of Commerce of the University of Alabama after a year's leave of absence during which time he acted as Southern field representative for the Unemployment Compensation Division of the Social Security Board.

James C. Nelson, formerly associate professor of marketing and transportation at the University of Tennessee, has resigned to accept a position with the United States Department of Agriculture.

Johnston Parr is acting as substitute for Miriam Locke in the Department of English in the School of Commerce of the University of Alabama. Miss Locke continues her graduate work at Northwestern University.

Earl P. Powers has accepted the appointment as instructor of accounting at the University of Florida.

Robert E. Rapp of the University of Texas has been recently appointed associate professor of finance at the University of Tennessee.

Jack Reeves, formerly of the University of Kentucky, has resigned his research position with the Kentucky Legislative Council to accept a place in the Kentucky Department of Revenue as assistant state local finance officer.

M. O. Ross, formerly associate professor of finance at the University of Tennessee, has resigned to accept the position of dean of the School of Business Administration at Butler University.

Marlyn A. Smull of the University of Virginia has been appointed instructor in economics at the University of Tennessee.

Woodrow M. Strickler, formerly of Northwestern University, has been appointed instructor in economics at the University of Louisville.

Minnie B. Tracey, assistant professor of secretarial science,

Alabama College, attended the University of Chicago during the summer of 1938.

Robert H. Tucker, dean of Washington and Lee University, was elected president of the Southern Economic Association for 1939 at the Birmingham annual meeting in October.

R. M. Wallace has returned to the School of Commerce at the University of Alabama to resume his position as instructor in business English after a year's leave of absence for graduate work.

Thurston Walls, formerly of the Kentucky Legislative Planning Board, is supply professor of economics at Mississippi State College during the absence of Frank J. Welch.

Frank J. Welch, head of the Department of Economics at Mississippi State College, is on leave of absence at the University of Wisconsin, where he is doing special work in the fields of public taxation and economic theory.

Marcus Whitman of the School of Commerce of the University of Alabama acted as analyst in the Securities Exchange Commission during the summer of 1938.

John B. Woosley, professor of economics in the University of North Carolina, was elected vice-president in charge of program of the Southern Economic Association at the Birmingham meeting last October for the year 1939.

John B. Van Sickle has been added to the faculty of Vanderbilt University as professor of economics.

J. Raymond Ylitalo has been appointed instructor in commerce in the School of Commerce of the University of Alabama.

BOOKS RECEIVED

Soviet Trade and Distribution. By Leonard E. Hubbard. New York: Macmillan Co., 1938. Pp. xiv, 381. $5.00.

Labor in the United States. By W. S. Woytinsky. Washington: Committee on Social Security, Social Science Research Council, 1938. P. xxii, 333. $3.50.

The Historical Records of North Carolina. Vol. II, The County Records Craven through Moore. Edited by C. C. Crittenden and Dan Lacy. Raleigh: North Carolina Historical Commission, 1938. Pp. x, 568.

An Introduction to Economic Analysis and Policy. By J. E. Meade. New York: Oxford University Press, 1938. Pp. xxi, 428. $2.50.

The Evolution of Finance Capitalism. By George W. Edwards. New York: Longmans, Green & Co., 1938. Pp. xvi, 429. $4.00.

Investment Trusts and Funds from the Investor's Point of View. By E. C. Harwood and Robert L. Blair. Cambridge, Mass.: American Institute for Economic Research, 1938. Pp. 104. $1.00.

International Economics. By P. T. Ellsworth. New York: Macmillan Co., 1938. Pp. xiii, 529. $4.00.

Principles of the New York Standard Fire Insurance Policy. By Abe J. Goldin. Philadelphia: Insurance Publishers, 1938. Pp. xiv, 319. $3.00.

Public Personnel Problems. By Lewis Meriam. Washington: Brookings Institution, 1938. Pp. xii, 440. $3.00.

Research Memorandum on Population Redistribution Within the United States. By Rupert B. Vance. New York: Social Science Research Council, 1938. Pp. vii, 134. $1.00.

Research Memorandum on Migration Differentials. By Dorothy Swaine Thomas. New York: Social Science Research Council, 1938. Pp. xii, 423. $2.00.

The Coming Struggle for Latin America. By Carleton Beals. Philadelphia: Lippincott Co., 1938. Pp. 401. $3.00.

Labor's Risks and Social Insurance. By Harry A. Millis and Royal E. Montgomery. New York: McGraw-Hill Book Co., 1938. Pp. xii, 453. $3.00.

The United States and World Organization, 1920–1933. By Denna Frank Fleming. New York: Columbia University Press, 1938. Pp. xiv, 569. $4.00.

The Changing Relative Importance of the Central Livestock Market. By Edward A. Duddy and David A. Revzan. Chicago: University of Chicago Press, 1938. Pp. 122, Appendix. $1.00.

Business Enterprise in the American Revolutionary Era. By Robert A. East. New York: Columbia University Press, 1938. Pp. 387. $4.25.

Income and Consumption. By Ronald S. Vaile and Helen G. Canoyer. New York: Henry Holt & Co., 1938. Pp. xv, 394. $2.25.

The Federal Reserve Bank of Boston. By Joseph H. Taggart. Boston: Bankers Publishing Co., 1938. Pp. xii, 283. $5.00.

Comparative Economic Systems: Capitalism, Socialism, Communism and Co-operation. By William N. Loucks and J. Weldon Hoot. New York: Harper & Bros., 1938. Pp. xiii, 838. $3.50.

The Pursuit of Happiness. By Herbert Agar. Boston: Houghton Mifflin Co., 1938. Pp. 387. $3.00.

Behold Our Land. By Russell Lord. Boston: Houghton Mifflin Co., 1938. Pp. xiii, 310. $3.00.

Cases on Public Utility Regulation. By Irston R. Barnes. New York: Crofts & Co., 1938. Pp. xx, 984. $5.00.

Work Accidents to Miners in Illinois. By Earl E. Klein. Chicago: University of Chicago Press, 1938. Pp. xvii, 256. $1.00.

Milestones of Marketing. By George Burton Hotchkiss. New York: Macmillan Co., 1938. Pp. xvi, 305. $2.50.

Financial Organization and the Economic System. By Harold G. Moulton. New York: McGraw-Hill Book Co., 1938. Pp. xviii, 515. $3.50.

Problems of Modern Society: An Introduction to the Social Sciences. By Paul W. Paustian and J. John Oppenheimer. New York: McGraw-Hill Book Co., 1938. Pp. xii, 571. $3.00.

Toward Full Employment. By Henry S. Dennison and Others. New York: Whittlesey House, McGraw-Hill Book Co., 1938. Pp. xiii, 297. $2.50.

The Challenge of Housing. By Langdon W. Post. New York: Farrar & Rinehart, 1938. Pp. xvi, 309. $3.00.

The Consumer-Buyer and the Market. By Jessie V. Coles. New York: John Wiley & Sons, 1938. Pp. xviii, 596. $3.50.

Labor Problems and Labor Law. By Albion Guilford Taylor. New York: Prentice-Hall, 1938. Pp. xiii, 663. $3.75.

The Howard University Studies in the Social Sciences. Vol. I, No. 1. Washington: Howard University, 1938. Pp. viii, 188.

America Now: An Inquiry Into Civilization in the United States. Edited by Harold E. Stearns. New York: Charles Scribner's Sons, 1938. Pp. x, 606. $3.00.

Capitalism in Crisis. By James Harvey Rogers. New Haven: Yale University Press, 1938. Pp. x, 210. $2.50.

Hope in America. By John Strachey. New York: Modern Age Books, 1938. Pp. 215. 50 cents.

Executive's 1939 Data Book. New York: Prentice-Hall, 1938. Pp. 58, maps, etc. 75 cents.

Inflation's Timing and Warning Symptoms of Its Explosive Stage. By Donald G. Ferguson and Allen H. Lester. Cambridge, Mass.: American Institute for Economic Research, 1938. Pp. 64. $1.00.

Government Price-Fixing. By Jules Backman. New York: Pitman Publishing Corp., 1938. Pp. xi, 304. $3 00.

Index of Research Projects. Volume I. Washington: Works Progress Administration, 1938. Pp. v, 291.

Farm Organization and Management. By G. W. Forster. New York: Prentice-Hall, 1938. Pp. xvi, 432. $3.00.

America Today: A History of the United States Since the World War. By Louis M. Hacker. New York: Crofts & Co., 1938. Pp. xiii, 354. $2.00.

Southern Plainsmen. By Carl Coke Rister. Norman, Okla.: University of Oklahoma Press, 1938. Pp. xviii, 289. $3.00.

France Faces Depopulation. By Joseph J. Spengler. Durham, N. C.: Duke University Press, 1938. Pp. xi, 313. $3.00.

The Causes of Economic Fluctuations: Possibilities of Anticipation and Control. By Willford I. King. New York: Ronald Press Co., 1938. Pp. xv, 353. $3.50.

It Is Later Than You Think: The Need for a Militant Democracy. By Max Lerner. New York: Viking Press, 1938. Pp. x, 260. $2.50.

How to Promote Community and Industrial Development. By Frederick H. McDonald. New York: Harper & Bros., 1938. Pp. xii, 260. $3.00.

McGillivray of the Creeks. By John Water Caughey. Norman, Okla.: University of Oklahoma Press, 1938. Pp. xvii, 385. $3.00.

Economics of Transportation. Revised Edition. By D. Philip Locklin. Chicago: Business Publications, 1938. Pp. x, 863. $4.00.

How to Operate Under the Wage and Hour Law. By Alexander Feller and Jacob E. Hurwitz. New York: Alexander Publishing Co., 1938. Pp. vii, 248. $3.50.

The Sugar Economy of Puerto Rico. By Arthur D. Gayer and Others. New York: Columbia University Press, 1938. Pp. xviii, 326. $3.75.

Everyday Law. By Ira H. Ruben. New York: Everyday Publishing Corp., 1938. Pp. 64. 50 cents.